The HMBP Package

HAZARDOUS MATERIALS BUSINESS PLAN

HAYWARD FIRE DEPARTMENT

A Certified Unified Program Agency

777 B Street, Hayward, CA 94541-5007
Tel.: (510) 583-4910 ♦ Fax: (510) 583-3641

For HFD Office Use Only			
Received	By:	Date:	
Reviewed	By:	Date:	
Posted	By:	Date:	

WHO SHOULD FILE AN HMBP?

GENERAL INSTRUCTIONS FOR ALL BUSINESSES IN HAYWARD

1. To determine whether you should complete and submit an HMBP or not, add up the total amount of each hazardous material throughout your entire business and use the following flow chart:

EACH hazardous material or hazardous waste is LESS THAN 55 gallons for liquids 500 pounds for solids 200 cubic feet for gases	AT LEAST ONE hazardous material or hazardous waste is EQUAL TO OR GREATER THAN 55 gallons for liquids 500 pounds for solids 200 cubic feet for gases
↓	↓
HMBP* NOT *REQUIRED **Complete and file Attachment 5, "Claim of Exemption"**	***HMBP REQUIRED*** **Complete and file required pages, for a complete HMBP submittal**
↓	↓
Review quantity of each hazard class. You might still need to *report* some materials if you meet or exceed the "Report Limits" listed in *Attachment 1 – Hazardous Materials Classification.* *(See No. 3 on the next page.)*	Complete and submit an HMBP. Fill out one *Hazardous Materials Inventory - Chemical Description* form for each material that meets or exceeds a limit listed above. *Make copies of the form before you begin working on your HMBP.*

2. **Exemptions** from HMBP requirements:

A. If you are a physician, dentist, podiatrist, veterinarian and or pharmacist and you store up to 1,000 cu. ft. of **medical gases like oxygen, nitrogen, or nitrous oxide** you are exempt from filing an HMBP (You may have 1,000 cu. ft. of each and still claim the exemption). IF YOU ARE A NEW BUSINESS, YOU MUST STILL NOTIFY THE HAYWARD FIRE DEPARTMENT AND COMPLETE THE FORMS, ONE TIME ONLY [H&SC, 25503.5(b)(1)].

B. Up to 275 gallons of **lubricating oils and related materials** (e.g. hydraulic fluids, crankcase oils, grease, or transmission fluid) is EXEMPT, IF you do not have more than 55 gallons of any one type of product. WASTE OIL IS NOT EXEMPT AND MUST BE REPORTED AT OR ABOVE 55 GALLONS, EVEN IF YOU QUALIFY FOR THE LUBRICATING OIL EXEMPTION [H&SC, 25503.5(b)(2)]. Report all quantities if you have over 55 gallons of waste oil or over 55 gallons of one type of lubricating oil.

C. Hazardous materials contained solely in a **consumer product** for direct distribution to, and for use by the general public is EXEMPT [H&SC, 25503.5(c)(1)]. WAREHOUSE QUANTITIES ARE NOT EXEMPT.

➲

3. The Hayward Fire Department, in accordance with provisions of the Hayward Fire Code, may require an HMBP for cases that may not fit the criteria described above. For example, the Fire Department requires that businesses expressly report it if they handle ANY QUANTITY of **radioactive materials,** materials listed under the **California Accidental Release Prevention (CalARP)** program, or of **extremely hazardous substances (EHS)** as defined by federal law.

4. Two principal sections of the HMBP, the *Business Owner/Operator Identification* form and the *Hazardous Materials Inventory – Chemical Description* form must be **reviewed and updated annually, by March 1 of each year.**

   If there are NO CHANGES to your inventory, you can simply complete, sign, and submit two forms: (1) an updated *Business Owner/Operator Identification* form, with or without changes, where you have checked the appropriate box in the "Additional Locally Collected Information", Box 133; and (2) Attachment 6 – *Certification Statement.*

   If there are changes to your inventory, you must complete, sign and submit a new *Business Owner/Operator Identification* form along with one or more new *Hazardous Materials Inventory – Chemical Description* form(s) to reflect the changes you are reporting. Submit also any other sections of the HMBP that you are updating.

5. The entire HMBP must be **reviewed and updated every three (3) years.**

   If you did not receive one, request for *The HMBP Package* which contains the standard HMBP form developed for use in **California** by **Certified Unified Program Agencies (CUPAs)**. The Fire Department is encouraging businesses in Hayward to update their HMBPs using this standard form. Call (510) 583-4910 to request for *The HMBP Package*.

6. In addition to the annual requirement for update or renewal, the HMBP or sections of the HMBP must be **amended** and submitted to the Hayward Fire Department **within 30 days** of the occurrence of any **of the following changes:**

   - Change of Business name;
   - Change in Ownership;
   - Change in Designated Operator;
   - Change of business location;
   - 25% increase or decrease in quantity of any previously reported hazardous material or hazardous waste;
   - Use of a previously undisclosed hazardous material or waste at or above the HMBP thresholds;
   - Changes in structure or layout of the building that involve relocation of hazardous materials or waste; or
   - Any other substantial change in any piece of information contained in the HMBP.

7. Submit **one original signed** copy of the HMBP to the Fire Department. Keep a copy on-site which should be made available to representatives of the Fire Department, if requested, during an inspection.

ABOUT THIS HMBP PACKAGE

This HMBP Package consists of two (2) kinds of documents:

(1) ***THE FORMS***
These are the forms that have to be completed and submitted. File Attachment 5, Attachment 6, Attachment 7, or Attachment 8 as applicable to your case.

(2) ***THE INSTRUCTIONS AND REFERENCES***
There are instructions for the completion of each form. There are also information sheets to assist you in completing the forms. Keep the information sheets for future reference.

THE FORMS

A. If you are exempted from filing an HMBP, complete and submit
1. Attachment 5: *Claim of Exemption* (For a declaration of "HMBP Not Required")

B. If you have a current HMBP on file with HFD which is still accurate, complete and submit
1. Business Owner/Operator Identification – Facility Information
2. Attachment 6: *Certification Statement* (For a declaration of "No Changes")

C. If you have to submit a new or updated HMBP, complete and submit the following forms:
1. Business Owner/Operator Identification – Facility Information
2. Hazardous Materials Inventory – Chemical Description
   (Use one page for each hazardous material or hazardous waste.)
3. California Annotated Site Map 1 – Location of Facility
   (Use to show where facility is located in Hayward.)
4. California Annotated Site Map 2 – Detailed Facility Map
   (Use to show where hazardous materials are located in facility.)
5. Emergency Response Plan / Contingency Plan / Unauthorized Release Response Plan
6. Emergency Response Training Plan for Employees
7. Attachment 7: *Property Owner Information* (If business owner does not own the business site)
8. Attachment 8: *Recyclable Materials Report* (If business qualifies as a recycler)

Submit signed originals of your HMBP or declarations to the: Hayward Fire Department, 777 B Street, Hayward, CA 94541

THE INSTRUCTIONS AND REFERENCES

Read the instructions and information contained in separate pages of the HMBP Package.

Instructions A: To complete the *Business Owner/Operator Identification* form
Instructions B: To complete the *Hazardous Materials Inventory - Chemical Description* form
Instructions C: To prepare *California Annotated Site Maps 1 & 2*
Instructions D: To prepare an *Emergency Response / Contingency / Unauthorized Release Plan*
Instructions E: To prepare an *Employee Training Plan*
Attachment 1: Hazardous Materials Hazard Categories
Attachment 2: Tables of Regulated Substances Under the CalARP Program
Attachment 3: Federal List of Extremely Hazardous Substances (EHS)
Attachment 4: Guidelines for the Placarding of Hazardous Materials Facilities

If, after reading the instructions, you still need help to prepare and submit your HMBP, contact the Hazardous Materials Office at (510) 583-4910 and ask to speak to a Hazardous Materials Investigator.

The main sections of your HMBP are:

1. Facility Information

Instructions A: How to complete the *Business Owner/Operator Identification* form

Form: Business Owner/Operator Identification – Facility Information

2. Chemical Inventory

Instructions B: How to complete the *Hazardous Materials Inventory – Chemical Description* form

Form: Hazardous Materials Inventory – Chemical Description
(Make copies of this form. You will need one for each hazardous material or hazardous waste.)

3. Maps

Instructions C: How to prepare *California Annotated Site Maps 1 & 2*

Form: California Annotated Site Map 1 – Location of Facility
(Use to show where facility is located in Hayward.)

Form: California Annotated Site Map 2 – Detailed Facility Map
(Use to show where hazardous materials are located in the facility.)

4. Emergency Response Plan

Instructions D: How to prepare an *Emergency Response Plan*

Form: Emergency Response Plan
(Use if your facility has not developed its own Emergency Response Plan. Use also to compare to your own plan and verify its completeness.)

5. Emergency Response Training Plan for Employees

Instructions E: How to prepare an *Emergency Response Training Plan*

Form: Emergency Response Training Plan
(Use if your facility has not developed its own Emergency Response Training Plan. Use also to compare to your own plan and verify its completeness.)

6. Miscellaneous Information

Form: Attachment 7 - Property Owner Information

Form: Attachment 8 - Do you have to file a Recyclable Materials Report?

Instructions A: Business Owner/Operator Identification

Please complete and submit the Business Owner/Operator Identification form (OES Form 2730). For the HMBP to be considered complete, this form must be signed by the appropriate individual. Please number all pages of your submittal. This helps us determine whether the submittal is complete and if any pages are out of sequence or missing.

(Note: the numbering of the instructions below follows the data element numbers that are on the form. These data element numbers are used for electronic submission and are the same as the numbering used in 27CCR.)

1. PERMIT NUMBER - This is assigned by the Hayward Fire Department (HFD) to identify your facility. See your current Consolidated Unified Program Permit/Registration.

3. BUSINESS NAME - Enter the full legal name of the business.

100. BEGINNING DATE - Enter the beginning date of the report. (Usually January 1 of the Reporting Year)

101. ENDING DATE - Enter the ending date of the report. (Usually December 31 of the Reporting Year)

102. BUSINESS PHONE - Enter the phone number at the site for the business, area code first, and including any extension.

103. BUSINESS SITE ADDRESS - Enter the street address to geographically locate the facility. P. O. Box numbers are NOT allowed.

104. CITY – The HFD Form already has, printed, "Hayward."

105. ZIP CODE - Enter the zip code for the business site. The extra 4-digit zip may also be added.

106. DUN & BRADSTREET - Enter the Dun & Bradstreet number (DUNS Number) for the business. Obtain your DUNS Number by logging onto http://sbs.dnb.com/creditbuilderIntro.asp

107. SIC CODE - Enter the Standard Industrial Classification (SIC) Code number for the primary business activity at this location.

108. COUNTY – The HFD Form already has, printed, "Alameda County."

109. BUSINESS OPERATOR NAME - Enter the name of the business operator. This would be the owner or chief executive officer.

110. BUSINESS OPERATOR PHONE - Enter phone number for the operator/owner, if different from the business phone.

111. OWNER NAME - Enter name of business owner, if different from the business operator.

112. OWNER PHONE - Enter the business owner's phone number if different from the business phone.

113. OWNER MAILING ADDRESS - Enter the owner's mailing address (street address or P. O. Box) if different from the business site address.

114. OWNER CITY - Enter the name of the city for the owner's mailing address.

115. OWNER STATE - Enter the 2-character state abbreviation for the owner's mailing address.

116. OWNER ZIP CODE - Enter the zip code for the owner's address. The extra 4-digit zip may also be added.

117. ENVIRONMENTAL CONTACT NAME - Enter the name of the person, if different from the Business Owner or Operator, who receives all correspondence on environmental concerns and who will respond to enforcement activity.

118. CONTACT PHONE - Enter the phone number, if different from Owner, Operator, or business phone, for the environmental contact.

119. CONTACT MAILING ADDRESS - Enter the mailing address for all correspondence to the environmental contact, if different from the site.

120. CITY - Enter the name of the city for the environmental contact's mailing address.

121. STATE - Enter the 2-character state abbreviation for the environmental contact's mailing address.

122. ZIP CODE - Enter the zip code for the environmental contact's mailing address. The extra 4-digit zip may also be added.

123. PRIMARY EMERGENCY CONTACT NAME - Enter the name of a person who can be contacted in case of an emergency involving hazardous materials at the business site. The contact shall have FULL facility access, site familiarity, and authority to make decisions for the business regarding incident mitigation.

124. TITLE - Enter the title of the primary emergency contact.

125. BUSINESS PHONE - Enter the business phone number for the primary emergency contact, area code first, and any extensions.

126. 24-HOUR PHONE - Enter a 24-hour phone number for the primary emergency contact. If it is not the contact's home phone number, then the service answering the phone must be able to immediately contact the person named as primary contact.

127. PAGER OR CELL PHONE NUMBER - Enter the pager or cell phone number for the primary emergency contact, if he or she has one.

128. SECONDARY EMERGENCY CONTACT NAME - Enter the name of a person who can be contacted in the event that the primary emergency contact is not available. The contact shall have FULL facility access, site familiarity, and authority to make decisions for the business regarding incident mitigation.

129. TITLE - Enter the title of the secondary emergency contact.

130. BUSINESS PHONE - Enter the business phone number for the secondary emergency contact, area code first, and any extension.

131. 24-HOUR PHONE - Enter a 24-hour phone number for the secondary emergency contact. If it is not the contact's home phone number, then the service answering the phone must be able to immediately contact the person named as secondary emergency contact.

132. PAGER OR CELL PHONE NUMBER - Enter the pager or cell phone number for the secondary emergency contact, if he or she has one.

133. ADDITIONAL LOCALLY COLLECTED INFORMATION – Check the appropriate boxes for this submittal. Attach a completed Attachment 6 (Certification Statement), Attachment 7 (Property Owner Information), or Attachment 8 (Recycler?) if required.

134. DATE - Enter the date that the document was signed.

135. NAME OF DOCUMENT PREPARER - Enter the full name of the person who prepared submittal (full HMBP or sections only).

136. NAME OF SIGNER - Enter the full printed name of the person signing the page. The signer should read and understand the "Certification."

SIGNATURE OF OWNER/ OPERATOR OR DESIGNATED REPRESENTATIVE - The Business Owner/Operator, or his or her officially designated representative, shall sign in the space provided. This signature executes the Certification on the document.

137. TITLE OF SIGNER - Enter the title of the person signing the document.

UNIFIED PROGRAM CONSOLIDATED FORM

HAYWARD FIRE DEPARTMENT

BUSINESS OWNER/OPERATOR IDENTIFICATION FACILITY INFORMATION

I. IDENTIFICATION

UNIFIED PROGRAM CONSOLIDATED PERMIT/REGISTRATION NUMBER 1	BEGINNING DATE 100	ENDING DATE 101

BUSINESS NAME *(Same as FACILITY NAME or DBA – Doing Business As)* 3	BUSINESS PHONE 102

BUSINESS SITE ADDRESS 103		

CITY 104		ZIP CODE 105
Hayward	**CA**	

DUN & BRADSTREET 106	SIC CODE (4 digit #) 107

COUNTY 108
Alameda County

BUSINESS OPERATOR NAME 109	BUSINESS OPERATOR PHONE 110

II. BUSINESS OWNER

OWNER NAME 111	OWNER PHONE 112

OWNER MAILING ADDRESS 113		

CITY 114	STATE 115	ZIP CODE 116

III. ENVIRONMENTAL CONTACT

CONTACT NAME 117	CONTACT PHONE 118

CONTACT MAILING ADDRESS 119		

CITY 120	STATE 121	ZIP CODE 122

IV. EMERGENCY CONTACTS

- PRIMARY -		- SECONDARY -	
NAME 123		NAME 128	
TITLE 124		TITLE 129	
BUSINESS PHONE 125		BUSINESS PHONE 130	
24-HOUR PHONE 126		24-HOUR PHONE 131	
PAGER or CELL PHONE # 127		PAGER or CELL PHONE # 132	

ADDITIONAL LOCALLY COLLECTED INFORMATION: *Check applicable boxes:* 133

- ❑ This form is accompanied by new or modified *Hazardous Materials Inventory - Chemical Description Form(s).*
- ❑ This form is the annual submittal and there are no changes to the facility or its haz mat inventory. *Attachment 6* enclosed.
- ❑ This location is on property owned by someone other than the business owner. *Attachment 7* enclosed.
- ❑ This facility is a recycler. *Attachment 8* enclosed.

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	DATE 134	NAME OF DOCUMENT PREPARER 135

NAME OF SIGNER (print) 136	TITLE OF SIGNER 137

Instructions B: Hazardous Material Inventory - Chemical Description

You must complete a separate Hazardous Material Inventory - Chemical Description form for each hazardous material (including hazardous waste) that you handle at your facility in amounts equal to or greater than 500 pounds solid, 55 gallons liquid, 200 cubic feet of gas (calculated at standard temperature and pressure) or when required for radioactive materials, Extremely Hazardous Substances, or CalARP-listed materials. First determine if you meet the reporting threshold by basing inventory on aggregate amounts of hazardous materials handled at your facility. Then report the materials based on what is handled in each building or adjacent/outside area of the facility with separate pages for unique occurrences of physical state, storage temperature, and storage pressure. *(Note: the numbering of the instructions below follows the data element numbers that are on the form. These data element numbers are used for electronic submission and are the same as the numbering used in 27CCR.)*

Data Element Boxes	Information Description
200. Add. Delete. Revise.	Check the appropriate box to identify if the chemical is being added to the inventory, deleted from the inventory, or if the information previously submitted is being revised. NOTE: You may leave this box blank if you are submitting an entire inventory with a new HMBP.
Page ___ of ____	The number of the page, starting with Business Owner/Operator Identification form as Page 1 and the total number of pages in the entire HMBP.
3. Business/Facility Name	Enter the full legal name of the business as entered on Business Owner/Operator Identification form.
201. Chemical Location	Describe where chemical can be found in the facility. Reference the building or outside/adjacent area where the hazardous material is handled.
202. Chemical Location Confidential? (EPCRA)	Check "YES" if the chemical location is not subject to disclosure under the Emergency Planning and Community Right-to-know Act (EPCRA) and you wish it to remain confidential.
1. Permit Number	This is your Unified Program Consolidated Permit/Registration Number.
203. Map Number	Reference the title/number of the detailed map, which shows the location of the hazardous material.
204. Grid Number	If grid coordinates are used, enter the grid coordinates of the location of the hazardous material. If applicable, multiple grid coordinates can be listed.
205. Chemical Name	Enter the proper chemical name *associated to the Chemical Abstract Service (CAS) number* of the hazardous material. *This should be* the International Union of Pure and Applied Chemistry (IUPAC) name found on the Material Safety Data Sheet (MSDS). NOTE: *If the chemical is a mixture, do not complete this field; complete the "common name" field instead.*
206. Common Name	Enter the common name or trade name of the hazardous material or mixture being reported.
209. CAS Number	Enter the Chemical Abstract Service (CAS) number for the hazardous material. For mixtures, enter the CAS number of the mixture if it has been assigned a number distinct from its components. If the mixture has no CAS number, leave this column blank and report the CAS numbers of the individual hazardous components in the appropriate section below.
206. Trade Secret?	Check "Yes" for if the information in this section is declared a trade secret, as defined in Chapter 6.95, Section 25511, Health and Safety Code, and "No" if it is not. **NOTE***: If yes, disclosure of the designated Trade Secret information is bound by Health and Safety Code Section 25511.*
208. EHS Listed?	Check "Yes" if the hazardous material is listed in the federal list of Extremely Hazardous Substances (EHS), 40CFR, Part355. If the material is a mixture containing a listed chemical, leave this section blank. Check "No" if the material is not listed. (See Attachment 3 – Federal List of Extremely Hazardous Substances.)
208-A. CalARP Listed?	Check "Yes" if the hazardous material is listed in the Table of Regulated Substances under the CalARP Program. If the material is a mixture containing a listed chemical, leave this section blank. Check "No" if the material is not listed. (See Attachment 2 – Table of Regulated Substances under the CalARP Program.)
210. Uniform Fire Code Hazard Classes	Uniform Fire Code Hazard Classes describe to first respondents the type and level of hazardous materials which a business handles. See the list titled **Hazardous Materials Hazard Categories.** Check boxes for all classes that apply to the material and write in the "class" number or letter where applicable**.**

211. Type of Material	Check the one box that best describes the type of hazardous material: pure, mixture, or waste. If waste material, check only that box. **NOTE:** *If mixture or waste, complete boxes 226 to 245*
212. Radioactive?	Check "Yes" if the hazardous material is radioactive or "No" if it is not.
213. Curies	If the hazardous material is radioactive, use this box to report its radioactivity in "curies."
210-A. NFPA 704 Ratings	Enter the NFPA ratings published for this material, using the NFPA diamond in the box. Refer to the enclosed Attachment 4 - Guidelines for the Placarding of Hazardous Materials Facilities.
214. Physical State	Check the one box that best describes the hazardous material: solid, liquid or gas.
216. Federal Hazard Categories	Check all categories that describe the physical & health hazards associated with the material: **PHYSICAL HAZARDS** **Fire:** Flammable Liquids and Solids, Combustible Liquids, Pyrophorics, Oxidizers **Reactive:** Unstable Reactive, Organic Peroxides, Water-Reactive, Radioactive **Pressure Release:** Explosives, Compressed Gases, Blasting Agents **HEALTH HAZARDS** **Acute Health** (Immediate): Highly Toxic, Toxic Irritants, Sensitizers, Corrosives **Chronic Health** (Delayed): Carcinogens
215. Largest Container	Provide the total capacity of the largest container in which the material is stored.
221. Unit	Check the unit of measure that is most appropriate for the material being inventoried: gallons, pounds, cubic feet, or tons. **NOTE***: If the material is listed in the EHS or CalARP Tables, all amounts must be reported in pounds. If the material is a mixture containing a listed chemical, report the units that the material is stored in (gallons, pounds, cubic feet, or tons).*
217. Ave. Daily Amount	For each building, calculate the **average daily amount** of the hazardous material or mixture containing a hazardous material that you project to be **on hand** during the course of the year. Calculations may be based on previous year's inventory by totaling all daily amounts and dividing the number of days the chemical is projected to be present on the site. **NOTE**: *This amount should be consistent with the units reported in box 221 and should not exceed the maximum daily amount*
218. Max. Daily Amount	The **maximum daily amount** of each hazardous material or mixture containing a hazardous material which is handled in a building of the facility at any one time over the course of the year. This is a projected amount for the current year; calculations may be based on the previous year's inventory. *This amount should be consistent with the units reported in box 221.* **NOTE:** *This amount does not constitute throughput BUT the m**aximum amount found on hand at any one time.***
219. Annual Waste Amt.	If the hazardous material being inventoried is a waste, provide an estimate of the total annual amount handled. (This is cumulative throughput.)
220. State Waste Code	If the hazardous material is a waste, enter the appropriate California 3-digit hazardous waste code as listed on the back of a Uniform Hazardous Waste Manifest.
222. Days On-Site	List the total number of days during the year that the material is on site. (365 if all-year-round)
223. Storage Container	Check all boxes that describe the types of storage containers in which the hazardous material is stored. **NOTE**: *If appropriate, you may choose more than one.*
224. Storage Pressure	Check the one box that best describes the pressure at which the hazardous material is stored.
225. Storage Temperature	Check the one box that best describes the temperature at which the hazardous material is stored.
226. % Weight	Enter the percentage weight of the hazardous components in a mixture or waste. If a range of percentages is available, report the highest percentage in that range.
227. Hazardous Components	When reporting a hazardous material that is a mixture, list up to five hazardous components in that mixture, by percent weight (refer to MSDS or the manufacturer). When reporting waste mixtures, mineral and chemical composition should be listed.
228. EHS Listed?	Check "Yes" if the component of the mixture is listed in the federal list of Extremely Hazardous Substances (EHS), 40CFR, Part 355. See Attachment 3, the EHS list.
229. CAS No.	Give all Chemical Abstract Service (CAS) Numbers for the listed hazardous components in the waste or mixture.

Unified Program Consolidated Form

Hayward Fire Department

Hazardous Material Inventory - Chemical Description

(One page per material, per location or area)

200 ☐ Add ☐ Delete ☐ Revise

Page_____ of _____

Business/Facility Name:[3]		
Chemical Location: [201]		**Chemical Location Confidential? (EPCRA)** ☐Yes ☐No [202]
Permit Number:	Map Number: [203]	Grid Number: [204]

Chemical Name: [205]		**Trade Secret?** [206] ☐Yes ☐No
Common Name: [207]		**EHS Listed?** [208] ☐Yes ☐No
CAS Number: [209]		**CalARP Listed?** [208-A] ☐Yes ☐No

Uniform Fire Code Hazard Classes [210]

(Check all boxes that apply to this chemical and write in the appropriate Class number or letter. See Attachment 1 – Hazard Categories.)

Physical Characteristics

- ☐ Explosives/Blasting Agents
- ☐ Class____ Flammable Liquid
- ☐ Class____ Combustible Liquid
- ☐ Class____ Oxidizer
- ☐ Flammable Gas
- ☐ Non-Flammable Gas
- ☐ Flammable Solid
- ☐ Class_____ Water Reactive
- ☐ Class_____ Unstable Reactive
- ☐ Class_____ Organic Peroxide
- ☐ Class_____ Pyrophoric

Health Characteristics

- ☐ Toxic
- ☐ Highly Toxic
- ☐ Corrosive
- ☐ Irritant
- ☐ Other Health Hazard
- ☐ Sensitizer
- ☐ Carcinogen
- ☐ Radioactive

Type of Material [211]	☐Pure ☐Mixture ☐Waste	Radioactive? [212] ☐ Yes ☐ No
Physical State [214]	☐Solid ☐Liquid ☐Gas	Curies [213] _____ Curies

NFPA 704 Ratings [210-A]

Federal Hazard Categories [216] *Check all that apply*

☐ Fire ☐ Reactive ☐ Pressure Release ☐ Acute Health ☐ Chronic Health

Largest Container [215]	Units [221] ☐ Gallons ☐ Cubic Feet ☐ Pounds ☐ Tons	Annual Waste Amt. [219]
Ave. Daily Amount [217]		State Waste Code [220]
Max. Daily Amount [218]	***If EHS-Listed or CalARP-Listed, amounts must be in pounds.***	No. of Days on Site [222]

Storage Container [223]

- ☐ Aboveground Tank
- ☐ Underground Tank
- ☐ Tank Inside Building
- ☐ Steel Drum
- ☐ Plastic/Nonmetallic Drum
- ☐ Can
- ☐ Carboy
- ☐ Silo
- ☐ Fiber Drum
- ☐ Bag
- ☐ Box
- ☐ Cylinder
- ☐ Glass Bottle
- ☐ Plastic Bottle
- ☐ Tote Bin
- ☐ Tank Wagon
- ☐ Rail Car
- ☐ Other... _____
- ☐ _____

Storage Pressure [224]	☐ Ambient ☐ Above Ambient ☐ Below Ambient	**If EPCRA, sign here:**
Storage Temperature [225]	☐ Ambient ☐ Above Ambient ☐ Below Ambient ☐ Cryogenic	

% Weight	Hazardous Components *(for mixture or waste only)*	EHS Listed?	C A S No.
1. [226]	[227]	☐ Yes ☐ No [228]	[229]
2. [230]	[231]	☐ Yes ☐ No [232]	[233]
3. [234]	[235]	☐ Yes ☐ No [236]	[237]
4. [238]	[239]	☐ Yes ☐ No [240]	[241]

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or greater than 0.1% by weight if carcinogenic, attach additional sheets of paper reporting the required information.

See Instructions B: Hazardous Material Inventory – Chemical Description

Instructions C: Maps

Attach at least two maps, one showing the LOCATION OF FACILITY and another showing locations of hazardous materials in a DETAILED FACILITY MAP. You may use the attached map pages with grid to prepare your site maps.

I LOCATION OF FACILITY

Where is this facility? Site Map 1 shall show where the facility is in Hayward. **The map shall show the street at the bottom of the page.** The street name shall be indicated and the map shall show the general layout of the location of the business including the following:

1. Compass NORTH direction on the top right corner
2. Scale of drawing, or note "NOT TO SCALE"
3. Property lines and property layout
4. Footprint(s) of building(s)
   In a multi-tenant building, identify your tenant space.
5. Driveways, parking lots, gates, internal roadways
6. Storm drains (both those on site and those on the street in front of the site)
7. Show and label water wells and groundwater monitoring wells and treatment systems
8. Fire hydrants (both those on-site and those on the street)
9. Fire sprinkler system equipment (PIV, FDC, Riser)
10. Location of security station
11. Locations of underground tanks, dispensers, and fills; aboveground tanks; storage sheds; including tanks, sheds and canopy structures for non-hazardous materials.
12. Outline and label outside storage areas for hazardous and non-hazardous materials
13. For facilities with several inside areas/buildings where hazardous materials are stored or used, label different areas. *Provide a separate DETAILED FACILITY MAP for each storage building or storage area.*

II DETAILED FACILITY MAP

Where are the hazardous materials stored or used in this facility? Site Map 2 shall provide sufficient details for emergency responders and others to understand the basic layout of the facility. **Show internal walls and doorways**. Provide an area name and brief description at the bottom of the page. Orient the map so that the main entrance to the building is at the bottom of the page. Clearly label the main entrance. *Provide a separate DETAILED FACILITY MAP for each storage building or storage area.* The following information shall be shown and indicated on each detailed facility map:

1. Areas/rooms where hazardous materials are stored or used
   Identify the hazard class of the materials present in each area/room.
2. Tanks & piping, vats, chemical sinks, storage cabinets, fume hoods, gas cabinets, work stations
3. Locations of alarm pull stations, chemical detection systems (e.g. locations of sensors, control panel, and enunciator panel)
4. Electrical and mechanical rooms
5. Emergency generators and compressors,
6. Containment systems (e.g. curbs, trenches, drip pans, containment pallets, etc.)
7. Warehousing and storage areas shall show layout of racks, palletized storage, and drum storage; indicate aisle width and storage height for materials in the warehouse.
8. Locations of emergency response and safety equipment including eye wash stations and emergency showers
9. Recycling / waste treatment systems

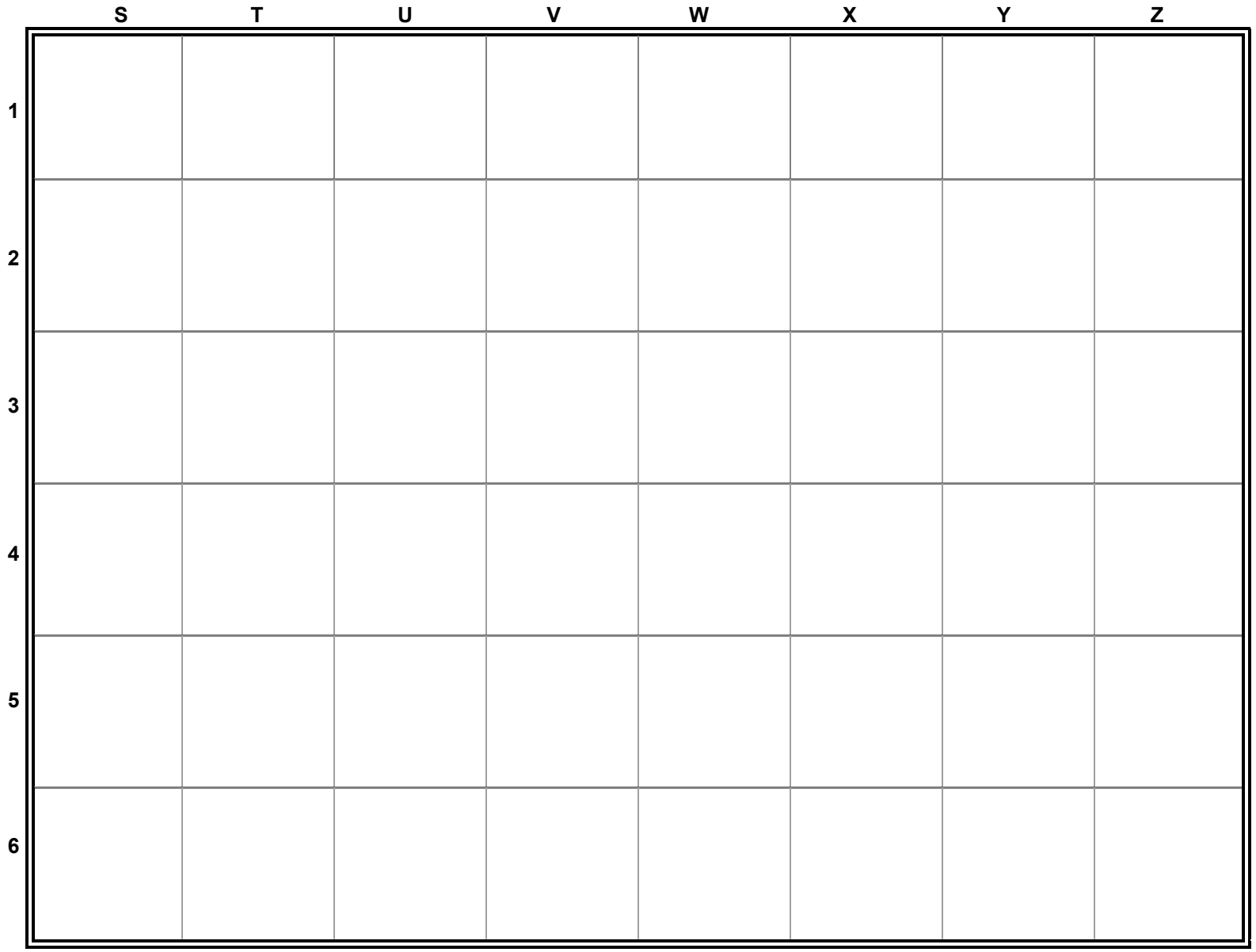
Location of Facility

Business Name:	Facility Address:	**Map No. ____** Page _____ of ____

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								

Map Notations:

Detailed Facility Map	Business Name:	Facility Address:	Map No. ____ Page _____ of ____



Map Notations:

Instructions D: How to Prepare an Emergency Response Plan or a Contingency Plan

To comply with various regulations, some facilities have to prepare multiple written plans that will deal with emergencies involving hazardous materials.

- The HMBP program requires that facilities prepare an **Emergency Response Plan** (ERP).

- The hazardous waste generator program requires that facilities prepare a **Contingency Plan** for the accidental release of hazardous waste.

- The underground storage tank program requires that operators of USTs prepare an **Unauthorized Release Response Plan** to address spills and leaks from USTs.

You may already have an Emergency Response Plan. If you do, review it and make sure that it contains the elements contained in the following "blank" model Emergency Response Plan. If your plan meets state requirements, you may submit the same as part of your HMBP.

IF YOU DO NOT HAVE AN EMERGENCY RESPONSE PLAN, complete the following "blank" model form. This will become your written Emergency Response Plan. Keep a copy on site. Familiarize your employees with it.

This Emergency Response Plan, if completed properly, will also meet the requirements for a Contingency Plan under the hazardous waste generator program and for an Unauthorized Release Response Plan under the underground storage tank program.

A complete HMBP should include an Emergency Response Plan!

Emergency Response Plan

FOR _____

(Name of Facility)

A. Internal and External Notification

A.1 **Notification of the Hayward Fire Department:** The following persons, in the order of responsibility, shall notify the HFD in the event of a spill, release or threatened release. (If the person first named is not available, the second person will assume notification responsibility… and on, down the list.)

Name	Title	Phone no.

Procedures for Notification of the Hayward Fire Department:

DO NOT CALL ANY FIRE STATION DIRECTLY.

DO NOT leave a message on any Fire Department Administrative Office phone.

CALL the Fire Department via 9-1-1 as soon as a person has knowledge of a release or threatened release. This applies to emergencies only. Use 911 for notifications of any active spills of any type of hazardous materials. Inform the Dispatcher of the nature of the call (Emergency).

For non-emergency situations, call the City of Hayward Dispatch Center at (510) 293-7000. Inform the Dispatcher of the nature of the call (Non-emergency).

WHEN USING A CELLULAR PHONE, DO NOT CALL 9-1-1 unless you are trying to get the California Highway Patrol. To reach the City of Hayward Dispatch Center by cell phone, call (510) 293-7000.

Information to provide the Fire Department:

1. Identify yourself and provide a callback phone number.
2. Provide the address of the facility and spill location on the site.
3. Specify the name of a contact person who shall meet the Emergency Responders and where he or she would be at the site.
4. Provide any available and pertinent spill information known at the time the report is being made.

A.2 Notification of State OES and other governmental agencies:

The State Office of Emergency Services shall be notified immediately when a release or threatened release will have significant off-site consequences or if the Federal EPA National Response Center is to be notified based on Federal notification thresholds. Following is a listing of the agencies that may need notification based on your facility's operations, materials and thresholds. ADD TO THE LIST AGENCIES/COMPANIES SPECIFIC TO YOUR FACILITY.

Agency	Phone
Hayward Fire Department Dispatcher: ***Call for Emergencies and Spill Notification***	9-1-1 or from a cell phone, (510) 293-7000
State Office of Emergency Services Notification Center	1-800-852-7550
Hayward Fire Department Hazardous Materials Office *(for information on regulatory issues and waste disposal,* ***not*** *for notification of spills/releases)*	510-583-4910
Hospital: St. Rose Hospital **Kaiser Permanente Medical Center – Hayward** **Other Medical Center:_____**	510-264-4026 510-784-4270 _____
Water Pollution Control Facility	510-293-5398
Hazardous Waste Contractor:	
Bay Area Air Quality Management District	415-771-6000
Alameda County Water District	510-659-1970
Regional Water Quality Control Board	510-622-2300

A.3 Internal Notification Procedures:

List the names and telephone numbers of other Company officers/personnel (business owner, safety coordinator, emergency response team members, etc.) who must be notified upon discovery of a release:

Title	Name	Phone Number

A.4 Alarm and Notification Systems:

Describe internal alarm/notification systems (for example: pull stations, yelling, intercom)

System Type	Location(s) (name areas covered by the system, such as office, warehouse, manufacturing, etc.)	How Activated (automatic or manual? by whom? when?)
automatic fire sprinkler system		
fire/haz mat pull stations		
intercom		
yelling		
chemical detection system		
other extinguishing systems		

B. Evacuation

B.1 Attach a map showing evacuation routes & meeting points.

B.2 Describe how the evacuation will be announced to employees and to others on site:

B.3 Describe when an evacuation will be required (conditions, chemicals, etc):

B.4 To where will employees and others be evacuated?

outside location	Where?
inside location	Where?

B.5 Maintain a roster of personnel at the evacuation point to account for all employees.

Primary Roll Monitor:	
Secondary Roll Monitor:	

C. Spill Procedures:

Whenever there is an imminent or actual emergency situation such as an explosion, fire, or chemical release, the emergency coordinator or other trained personnel shall do the following:

(a) Identify the character, exact source, amount and extent of any released hazardous materials.

(b) Assess possible hazards to human health or the environment that may result from the explosion, fire, or chemical release. This assessment must consider both direct and indirect effects. (e.g. the effects of any toxic, irritating, or asphyxiating gases that may be generated; or the effects of any surface water run-off from water or chemical agents used to control fire)

(c) Monitor for leaks, pressure build-up, gas generation, or ruptures in valves, pipes, or other equipment that have been shut down in response to the incident.

(d) Take all reasonable measures necessary to ensure that fires, explosions, and chemical releases do not occur, recur, or spread to other areas at the facility.

Appendix #1 to the Emergency Response Plan – Spill Procedures
describes specific spill/release procedures

Appendix #2 to the Emergency Response Plan – List of ER Equipment
provides a listing of the emergency response equipment

Appendix #3 to the Emergency Response Plan –
Additional Spill Procedures for Underground Storage Tanks
describes specific procedures for UST spills, leaks, and alarm situations

For all reportable spills the following actions are to be taken concurrent with notifications:

- Isolate the spill area.
- Evacuate the area/building, if necessary, per the evacuation plan.
- Keep unnecessary employees/persons at a safe distance from the incident.
- Identify Hot, Medium and Cold Zones, as needed. (These are areas that will dictate the type of personal protective equipment required of people who will be in the specified zones.)
- Set-up a command location for oversight of the response and/or for coordination with the Fire Department.
- If an Emergency Response Team is established, coordinate all activities through the Incident Commander at the Incident Command Post.
- If no Emergency Response Team is required, establish a spill response, mitigation, and cleanup plan and convey the information to those involved and to the Fire Department.
- Carry out spill procedures as indicated in Appendix #1 to the Emergency Response Plan.

D. Coordination with the Hayward Fire Department

- A designated employee shall meet responders at a designated location.
- The employee will be the Fire Department liaison and shall advise the Fire Department of facility information, including but not limited to layout of the facility, nature of the spill, hazards of material, ability of facility personnel to mitigate and cleanup the spill, location of facility spill response equipment, etc.
- The employee will escort the Fire Department to the spill location or incident command post, if one has been established.
- The employee or a spill coordinator will assist in the coordination between facility response personnel and the Fire Department response personnel as needed.

D.1 Describe and identify the most commonly used (or most likely) entry and/or meeting location for Fire Department response:

Fire Department entry location	
Fire Dept. and facility meeting location	

D.2 Emergency Coordinators:

Primary Coordinator	Secondary Coordinator
Name:	Name:
Title:	Title:
Work Phone:	Work Phone:
After-hours Phone:	After-hours Phone:
Pager or cell phone:	Pager or cell phone:

D.3 Private and Public Arrangements:

(Check applicable statements.)

☐ We have no formalized written agreements with any private emergency response contractor.

☐ We have a formalized Emergency Response Team.

☐ We conduct drills/training with the Hayward Fire Department

☐ We have formalized written agreements with the following companies:

Name of Company	
Address	
Phone (include after-hours)	
Contact Person	

Name of Company	
Address	
Phone (include after-hours)	
Contact Person	

E. Resumption of Normal Operations, Cleanup and Disposal:

Before operations are resumed in areas of the facility affected by the incident, the following actions shall be conducted:

Action	Person Responsible
1) Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or chemical release at the facility.	
2) Ensure that no material that is incompatible with the released material is transferred, stored or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.	
3) Notify the Hayward Fire Department Hazardous Materials Office that the facility is in compliance with requirements (a) and (b) above.	
4) If an evacuation was made, the area evacuated shall be surveyed and a determination made that there are no hazards to returning employees. If the spill was likely to have produced an atmosphere in which concentrations of hazardous materials exceeded allowable levels, actions shall be taken to verify that breathing zones are safe to returning employees. Use of monitoring devices or sampling may be required for verification.	

F. Reporting:

A written report documenting the spill response actions taken, the cleanup and disposal activities, including copies of receipts/manifests for disposal, and an analysis of the cause of the spill/release will be sent to the Hayward Fire Department. Recommendations and time schedule for correction of any deficiencies in equipment, procedures or training will also be included in the report.

Send the report to the Hazardous Materials Office of the Hayward Fire Department within 30 days of the incident. If the incident requires a report to the California OES (depending on quantity released) it shall be done on the State OES form within 30 days of the spill and a copy submitted to the Hazardous Materials Office.

Name of person responsible for reports	
Title	
Telephone Number	

SPILL PROCEDURES

Provide spill procedures for the following situations (as they apply to your facility):

Describe the types of spills that might occur and briefly describe the actions to be taken when they do occur. Use terms like: contain, absorb, dike, spill kit, drain, pump, place into container, sweep, shut off, *in your description. For indicating type of Personal Protective Equipment (PPE) use levels designated by OSHA:A, B, C, D. Indicate if you made modifications in your case.* ***If power is to be shut off or some equipment needs to be shut down, please describe the procedures, naming the employees involved and describing where shut off valves or switches are located.***

Type of Emergency	Response Actions	Person Responsible	PPE
Hazardous Material Spills at/from: • Workstations • Containers • Drums • Piping • Tanks • Trucking area • Rail Transfers • Other_____			
Hazardous Waste Spills/Releases: • Containers • Drums • Treatment system • Trucking			

Type of Emergency	Response Actions	Person Responsible	PPE
Fire: *Call 9-1-1 immediately to report any fire* *Immediately evacuate all personnel*	*An extinguisher may be used for fires that can be attacked within 2 minutes by trained personnel. Describe the fire protection and alarm systems that are present in your facility.*		
Explosion: *Call 9-1-1 immediately to report any fire* *Immediately evacuate all personnel*	*Identify if there are explosion hazards and if there are systems in place to mitigate or detect such hazards. Provide any specific operations that you have.*		
Earthquake: *Duck and take cover under a table or doorway* *Get out and stay away from falling hazards*	*Identify areas requiring immediate attention.*		
Other:			

EMERGENCY RESPONSE PLAN – APPENDIX 2

LIST OF EMERGENCY RESPONSE EQUIPMENT

Equipment Category	√ if available	Equipment	Location	Description: specify type and quantity
Personal Protective Equipment, **Safety Equipment,** **and** **First Aid Equipment**		Chemical Protective Boots		
		Chemical Protective Gloves		
		Safety Glasses/Goggles/Face shields		
		Chemical Protective Clothing		
		Hard Hats		
		Chemical Monitoring Equipment (describe)		
		First Aid Kits		
		Eye Wash Stations		
		Safety Showers		
		Cartridge Respirators		
		SCBA units		
		Other (describe)		
Fire Extinguishing Systems		Fire Extinguishers		
		Fire Hose		
		Foam with nozzles/hose		
Spill Control Equipment, and Decontamination Equipment		Absorbents, Neutralizers		
		Shovels/Brooms/Squeegees		
		Overpack drum/Spill drum		
		Absorbent booms/pillows/pads		
		Decontamination Equipment (describe)		
		Gas cylinder leak repair kits (describe)		
		Other (describe)		
Communication and Alarm Systems		Telephones		
		Intercoms/PA systems		
		Portable 2 way radios		
		Pull Station alarms		
		Automatic alarms		
Check here if additional pages are attached			**( )**	

ADDITIONAL SPILL PROCEDURES FOR UNDERGROUND STORAGE TANKS

Provide spill procedures for the following situations (as they apply to your facility):

Describe the actions to be taken in response to the requested information on column 1 of the table below. Note that the activation of an underground storage tank alarm system requires the notification of the Hayward Fire Department. If any spill or release of material has occurred into the environment, onto the ground or pavement or into a containment system, notification is required immediately. Call 9-1-1! If there is no apparent release but the alarm sounded, call 510-583-4910 and inform the Hazardous Materials office. Failure to notify will be considered a violation and can result in penalties or fines of up to $1,000 per day per violation.

Type of Incident Involving UST and its Monitoring and Alarm Systems	**Actions to be Taken** ***What does attendant do? Who should be called? What does the owner do? What does the fuel supplier do?***	**Person Responsible and Contact Number**
What to do when monitoring system indicates a leak …		
What to do when fuel is spilled on surface pavement or ground during filling or dispensing…		
Describe available spill-control equipment. Where located? How maintained?		
Which contractor is called in for alarm or spill situations?		
Which contractor is called in for contaminated fuel and hazardous waste disposal?		
How is the Fire Department notified when the monitoring alarm goes off?		

Instructions E: How to Prepare an
Emergency Response Training Plan
for your Employees

If you prepare a Hazardous Materials Business Plan (HMBP) or if you are a hazardous waste generator (HWG), you are required to prepare a Training Plan for your employees who handle hazardous materials or hazardous waste.

You can prepare your own Emergency Response Training Plan by going through these instructions and using them as guidelines. They explain the elements required to be included in your Training Plan.

OR

You can complete the following three-page form (Emergency Response Training Plan), which will then be your written Training Plan. The plan should include the attachments provided, T-1 to T-4. These meet the requirements for forms that you must have to document the implementation of your training plan. Although this training plan form will be sufficient for HMBP and HWG requirements, use of this form alone may not meet all your training plan obligations under other State or Federal Laws.

1. SCOPE

The Training Plan addresses the requirements of the Hazardous Materials Business Plan (HMBP) and Hazardous Waste Generator (HWG) programs. Your business may be subject to other state or federal training requirements such as OSHA's Illness and Injury Prevention Plan (IIPP) , Hazard Communication (HAZCOM), etc. You may combine the HMBP and HWG training plans with your other training programs. You are not required to submit your training plan but it should be made available to inspectors upon request.

- Title 19 requires employee training to carry out the Emergency Response Plan of the HMBP (required by Chapter 6.95 of the California Health and Safety Code).

- Title 22 requires employees to be trained in hazardous waste handling and disposal to include proper handling, labeling, and disposal of hazardous waste as required by Chapter 6.95 of the California Health and Safety Code.

- The Fire Code requires that persons responsible for the operation of areas where hazardous materials are stored, dispensed, handled, or used, shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak, or spill. It also requires that responsible persons be trained as a fire department liaison and shall aid in the preplanning for emergencies, and identification of the locations where hazardous materials are located and shall have access to MSDS and be knowledgeable in the emergency procedures.

2. RESPONSIBILITIES

This training plan shall identify who is responsible for implementing it. This can be one person or several individuals. The plan should, at the very least, identify the individual with overall responsibility.

3. NEW EMPLOYEES

The plan must ensure that all employees required to be trained, including new employees, receive initial training.

4. NEW ASSIGNMENTS AND CHANGES IN OPERATIONS

In the event of a new assignment or a change in facility operations that affect the way employees handle hazardous materials or hazardous waste, training must be provided the affected employees before the new assignment or the change in operation takes place.

5. REFRESHER TRAINING

The Plan must ensure that employees receive refresher training (at least annually for hazardous waste operations). Refresher training can be accomplished in a variety of ways, including safety meetings and/or attending formal classes.

6. TRAINING TOPICS

I. The Hayward Fire Code Section 8001.11.1 requires that employees are trained to:

- Be familiar with the chemical nature of the regulated materials
- Carry out appropriate mitigation measures for fires, leaks or spills
- Act as liaisons with the fire department
- Provide MSDS to the fire department
- Know the facility's emergency response procedures

II The California Code of Regulations, Title 19, requires that training include:

- The Emergency Response Plan
- Notification procedures for coordination with local emergency response organizations
- Use of emergency response equipment and supplies
- Procedures on the use, inspection, repair and replacement of the facility's emergency response and monitoring equipment
- Communication and alarm systems
- Response to a release or threatened release of hazardous materials
- Response to fires or explosions
- Guidelines for emergency medical care

III The California Code of Regulations, Title 22, requires that training of employees in <u>hazardous waste facilities</u> include the following topics:

- Packaging and labeling
- On-site management and storage requirements
- Proper use of safety equipment
- Proper use of hazardous waste management supplies
- Off-site transportation requirements
- Interaction with waste haulers and disposal sites
- Conducting periodic inspections
- Key parameters for automatic waste feed cut off systems (if applicable)
- Response to ground water contamination incidents (if applicable)
- Shutdown of operations (if applicable)

7. EMERGENCY RESPONSE TEAM

An Emergency Response Team consists of personnel that have received training in emergency response procedures, including the mitigation and cleanup of possible hazardous material spills at this site.

Adequate training in conducting such operations shall be provided and documented in addition to the OSHA Hazardous Waste Operations (HAZWOPER) Training at the 40-hour Emergency Responder level.

8. TRAINING TOPICS BY JOB TITLE

While all the topics listed in Section 6 must be covered at this facility, not every individual must be trained in every topic. Training given to each employee will be commensurate with the tasks assigned to that employee.

For example, an employee who physically handles hazardous waste but does not fill out or manage manifest needs training in safe handling but not in manifesting; while the clerical person who is responsible for the manifest needs training in manifesting but not in handling waste.

Most persons should be knowledgeable in some portion of the emergency response plan. Even those with office jobs should understand the internal alarms, how and where to evacuate, whom to call if they observe a problem, and who is responsible for immediate notification of the Fire Department.

9. DOCUMENTATION

A copy of the plan, attachments, and other training forms and documents shall be maintained for at least three years after the Training Plan is first implemented. At a minimum, the Training Plan shall be reviewed every three years, and updated as needed. Each time any change in this plan is made, the affected sections shall be revised, and a copy shall be submitted to the Hayward Fire Department Hazardous Materials Office within 30 days of the change.

EMERGENCY RESPONSE TRAINING PLAN

1. Scope

This plan is designed to provide employees with training on hazardous materials and hazardous waste that will satisfy the requirements of the California Health and Safety Code Chapter 6.95 and Chapter 6.5.

Facility Name:	
Address:	
Main Activity:	
Buildings or Areas where hazardous waste or hazardous materials are found:	

2. Responsibilities

The following persons are responsible for ensuring that this Training Plan is implemented:

Name/Title	Training Responsibility

3. Employees/New Employees

Attachment T1 documents each employee's training.

New employees are trained during orientation, before starting on a job. ❒ YES ❒ NO

New employees are trained within six months of hire date. ❒ YES ❒ NO

4. New assignments or Changes in Operations

In the event of new assignments or of changes in operation, affected employees are trained before the new assignment or the change in operation takes place. ❒ YES ❒ NO

5. Refresher Training

Attachment T2 documents refresher training.

Refresher Training is provided at least annually. ❒ YES ❒ NO

How often is refresher training provided? Every _____ months

Refresher Training is done through: *(check all that apply)*

❒ Outside classes

❒ Safety Meetings

❒ In-house classes provided by contractor

❒ In-house classes conducted by in-house trainers*

(Complete Attachment T4 to document qualification of in-house trainers)

6. Training Topics

The following table indicates the training topics covered. Other documents on these training topics are maintained and are available to the inspector upon request.

Training Topics	Is Topic Covered?			Are Course Documents Available?
	YES	NO	N/A	
General Safety Precautions:				
Material Safety Data Sheets				
Nature and hazards of materials present				
Emergency Response:				
The Emergency Response Plan				
Notification/coordination with local agencies				
Procedures for use, inspection, repair, and replacement of facility emergency response and monitoring equipment				
Communication and alarm systems				
Response to fires or explosions				
Response to release or threatened release of hazardous materials				
Hazardous Waste Management:				
On-site management and storage requirements				
Packaging and labeling				
Proper use of safety equipment				
Proper use of hazardous waste management supplies				
Off-site transportation requirements				
Interaction with waste haulers and disposal sites				
Conducting periodic inspections (storage areas, tanks etc.)				
Key parameters for automatic waste feed cut off systems				
Response to groundwater contamination incidents				
Shutdown of operations				

7. Emergency Response Team

The facility has a formally organized Emergency Response Team. ❒ YES ❒ NO
Attachment T3 lists the members of the Emergency Response Team.

Team will coordinate with HFD to conduct at least one drill per year. ❒ YES ❒ NO

Team will coordinate with HFD to conduct coordination training at least once per year. ❒ YES ❒ NO

After each incident, the Team will meet with the HFD for a joint post-incident evaluation. ❒ YES ❒ NO

8. Training Topics by Job Title

Employees are trained based on their level of involvement in the handling, use, or generation of hazardous materials or hazardous waste.

Attachment T1 details the topics each employee has had training on.

9. Training Documentation

The following employees are responsible for the maintenance and update of this Emergency Response Training Plan.

They shall also keep and maintain all training records and other documents associated with the Emergency Response Training Plan.

Name	Title	Phone Number

Attachment T1 - Employee Training Record

Name of Employee: _____ Start Date: _____ Transfer Date: _____ Termination Date:_____

Position/Title: _____

Job Description (hazardous materials handling):

_____

_____

_____

_____

_____

_____

	Contingency Plan							Labeling				Compatibility/Storage							Manifesting				Chemical Hazards		
	Emergency Response Plan	Guidelines for emergency medical care	Notification/coordination with fire dept.	Emergency equipment use/maintenance	Spill response actions	Fire/explosion response	Emergency Coordinators	How to fill out labels	Accumulation start date	Labeling of tanks	Hazardous properties	Incompatibles – general /on-site	Weekly inspections	Closed containers - rags	90 day storage time	Aisle space regulation	Storage to minimize accidental release	Empty container regulation	When and how to use	Generator/TSDF copies	Record keeping	DOT Shipping names of facility wastestreams	DTSC exception reports	Material Safety Data Sheet use/information	Hazards of materials present
Employers: Check "√" the boxes for the skills, education or qualifications required by this position. →																									

Title of Class/Course Taken & Completed	Date Taken	Topics and Skills Covered at the Class/Course Taken																							

Attachment T2

Training Class Record – Refresher Training

DATE: _____ **TRAINER/INSTRUCTOR:** _____

TRAINING TYPE:
- ❒ PROFESSIONAL CLASS (outside)
- ❒ CONSULTANT-PROVIDED (in-house)
- ❒ IN-HOUSE TRAINER'S TRAINING CLASS*
- ❒ SAFETY or STAFF MEETING*

** Complete Attachment T4 for qualification of trainer*

TOPICS COVERED

General Subject	Details

ATTENDEES / PRESENT

Name	Title	Signature

Attachment T3
Hazardous Materials Emergency Response Team Members

Name	Title	Contact Telephone Numbers				40-hr ERT HazWOper (year)	Refresher last taken (year)	Other Training Beyond HazWOper
		Work	Home	Cellular	Pager			

Definitions of Emergency Response Training Levels

Responsibility	Minimum Initial Training Required	Refresher Required	# of Hours Required
AWAR - First Responder Awareness Level: Identifies hazards; contains and cleans up small spills as part of routine work/maintenance; sounds alarm.	Hazard Communication Standard General Emergency Response and Evacuation	Yes	N/A
OPER - First Responder Operations Level: Contains spills from a safe distance.	8-hour Emergency Response (related to duties)	Yes	4
TECH - Hazardous Materials Technician Level: Responsible for spill control, clean-up and coordination with off-site responders.	40-hour Emergency Response (related to duties)	Yes	8
SPCLST - Hazardous Materials Specialist Level: Responsible for spill control, clean-up and coordination with off-site responders	24-hour Emergency Response (related to duties)	Yes	8

Attachment T4

Qualifications of In-House Trainer

List the name and qualifications of each person assigned training responsibilities. Include experience level, number of years, formal training, and any other reason used to establish that the person has the knowledge to provide training in a specific area.

Name and Title	Qualifications	Training Responsibilities

ATTACHMENTS

Attachments 1 - 4 are tables and lists to help you classify your hazardous materials and complete the Hazardous Material Inventory - Chemical Description section of your HMBP. Attachments 5 - 8 are forms you submit to make declarations about your business and your HMBP.

Attachment 1:	**Hazardous Materials Hazard Categories**
Attachment 2:	**Tables of Regulated Substances Under the CalARP Program**
Attachment 3:	**Federal List of Extremely Hazardous Substances (EHS)**
Attachment 4:	**Guidelines for the Placarding of Hazardous Materials Facilities**
Attachment 5:	**Claim of Exemption** (For a declaration of "HMBP Not Required")
Attachment 6:	**Certification Statement** (For a declaration of "No Changes")
Attachment 7:	**Property Owner Information** (If business owner does not own the business site)
Attachment 8:	**Do you have to file a Recyclable Materials Report?**

HMBP Attachment 1:
HAZARDOUS MATERIALS HAZARD CATEGORIES
(Based on the 2001 California Fire Code)

***Note**: Permitting and reporting quantities vary with the material's characterization. Some materials have multiple hazards. In these cases, the most restrictive quantities apply in permitting requirements but all hazards should be considered in handling and storage requirements. The following should not be used as the sole means of classifying hazardous materials. **"Permit"** quantities listed means that a permit from the Fire Department is required if this class of material is handled at or above the specified quantity. **"Report"** means that the material should be reported in the Hazardous Materials Business Plan (HMBP) for the facility if it is at or above the specified quantity.*

A. Physical Hazards

1. Explosives, Blasting Agents, and Detonators
(Permit = Any Amount; Report = Any Amount)

Explosive is a material that causes sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperatures. Blasting agent is a material or mixture consisting of a fuel and an oxidizer, not otherwise classified as explosive. Detonator is a component in an explosive train that is capable of initiating detonation in a subsequent high explosive component.

(a) **High explosives**. Can be detonated by means of blasting caps when unconfined. Examples: dynamite, TNT, nitroglycerine, C-3, C-4.

(b) **Low explosives**. Can be deflagrated when confined. Examples: black powder, smokeless powder, propellant explosives, display fireworks.

(c) **Blasting agents**. Oxidizer and liquid fuel slurry mixtures. Examples: ammonium nitrate combined with fuel oil.

2. Compressed Gases

Compressed gas is a material or mixture which is a gas at 68^{o}F or less at one atmosphere of pressure (14.7 psia) AND has a boiling point of 68^{o}F or less at 14.7 psia, which is either liquefied, nonliquefied, or in solution. Exception: Gases which have no other health or physical hazard properties are not considered "compressed" until the pressure in the packaging exceeds 41 psia at 68^{o}F.

(a) **Flammable Gas**. Examples: acetylene, carbon monoxide, ethane, ethylene, hydrogen, methane. (Ammonia will ignite and burn, although its flammable range is too narrow for it to fit the definition of a flammable gas.)
(Permit = 200 cu ft at STP; Report = 200 cu ft at STP)

***Note:** STP refers to standard temperature and pressure, defined as* 0^{o}C *(*32^{o}F*) and 1 atmosphere (14.7 psi) pressure*

(b) **Oxidizing**. Examples: oxygen, ozone, oxides of nitrogen, chlorine, fluorine. Chlorine and fluorine do not contain oxygen, but react with flammable materials in a manner similar to oxygen.
(Permit = 500 cu ft at STP; Report = 200 cu ft at STP)

(c) **Corrosive**. Examples: ammonia, hydrogen chloride, fluorine.
(Permit = 200 cu ft at STP; Report = 200 cu ft at STP)

(d) **Highly toxic**. Examples: arsine, cyanogen, fluorine, germane, hydrogen cyanide, hydrogen selenide, nitric oxide, phosphine, stibene.
(Permit = Any Amount; Report = Any Amount)

(e) **Toxic**. Examples: chlorine, hydrogen fluoride, hydrogen sulfide, silicon tetrafluoride, phosgene.
(Permit = Any Amount; Report = Any Amount)

(f) Inert (chemically unreactive). Examples: argon, helium, krypton, neon, nitrogen, xenon.
(Permit = 6,000 cu ft at STP; Report = 200 cu ft at STP)

(g) Pyrophoric. Examples: diborane, dichloroborane, phosphine, silane.
(Permit = Any Amount; Report = Any Amount)

(h) Unstable (reactive). Examples: butadiene (unstabilized), ethylene oxide, vinyl chloride.
(Permit = Any Amount; Report = Any Amount)

3. Flammable and Combustible Liquids

(a) Flammable liquids:
(Permit = 5 gal; Report = 55 gal)

CLASS I-A liquids have flash points below 73°F and boiling points below 100°F.

CLASS I-B liquids have flash points below 73°F and boiling points at or above 100°F.

CLASS I-C liquids have flash points at or above 73°F but below 100°F.

b) Combustible liquids:

CLASS II liquids have flash points at or above 100°F but below 140°F.
Example: diesel fuel, kerosene
(Permit = 25 gal; Report= 55 gal)

CLASS III-A liquids have flash points at or above 140°F but below 200°F.
Example: phenol, creosote oils
(Permit = 25 gal; Report = 55 gal)

CLASS III-B liquids have flash points at or above 200°F.
Example: motor oil, ethylene glycol
(Permit = 55 gal; Report = 55 gal)

4. Flammable Solids
(Permit = 100 lbs; Report = 500 lbs)

Flammable solid is a solid substance that is not defined as explosive or blasting agent, is liable to cause fire through friction or as a result of retained heat from manufacture, has an ignition temperature lower than 212°F, or burns so vigorously and persistently when ignited that it creates serious hazards.

(a) Organic solids. Examples: camphor, cellulose nitrate, naphthalene.

(b) Inorganic solids. Examples: decaborane, lithium amide, phosphorous heptasulfide, phosphorous sesquisulfide, potassium sulfide, anhydrous sodium sulfide, sulfur.

(c) Combustible metals (except dusts and powders). Examples: cesium, magnesium, zirconium.

(d) Combustible dusts and powders (including metals). Finely divided flammable solids which may be dispersed in air as a dust cloud. Examples: wood sawdust, plastics, coal, flour, powdered metals (few exceptions).

5. Oxidizers

Oxidizer is a material - other than a blasting agent or explosive - that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

(**a) Gases**. Examples: oxygen, ozone, fluorine, chlorine (see Compressed Gases, Oxidizing).
(Permit = 500 cu ft at STP; Report = 200 cu ft at STP)

(b) Liquids. Examples: bromine, hydrogen peroxide, nitric acid, perchloric acid, sulfuric acid. (See more detailed classification below.)

(c) Solids. Examples: chlorates, chromates, chromic acid, iodine, nitrates, nitrites, perchlorates, peroxides. (The following gives a more detailed classification.)

Classifications of <u>liquid and solid oxidizers</u> according to hazard:

CLASS 4: An oxidizing material that can undergo an explosive reaction when catalyzed or exposed to heat, shock, or friction. Examples: ammonium perchlorate, ammonium permanganate, guanidine nitrate, hydrogen peroxide solutions more than 91% by weight, perchloric acid solutions more than 72.5 % by weight, potassium superoxide, and tetranitromethane.
(Permit = Any Amount; Report = Any Amount)

CLASS 3: An oxidizing material that will cause a severe increase in the burning rate of combustible material with which it comes in contact. Examples: ammonium dichromate, bromine pentafluoride, bromine trifluoride, hydrogen peroxide 52% to not more than 91% concentration by weight, calcium hypochlorite over 50% by weight, potassium bromate, potassium chlorate, potassium chlorite over 40% by weight, perchloric acid solutions 60% to 72.5% by weight, potassium dichloro-s-triazinetrione (potassium dichloroisocyanurate), sodium chlorate, sodium chlorite over 40% by weight and sodium dichloro-s-triazinetrione (sodium dichloroisocyanurate).
(Permit = 1 gal liquid or 10 lbs solid; Report = 55 gal liquid or 500 lbs solid)

CLASS 2: An oxidizing material that will moderately increase the burning rate or which may cause spontaneous ignition of combustible material with which it comes in contact. Examples: barium bromate, barium chlorate, barium hypochlorite, barium perchlorate, barium permanganate. 1-bromo-3-chloro-5, 5-dimethylhydantoin, calcium chlorate, calcium chlorite, calcium hypochlorite (50 percent or less by weight), calcium perchlorate, calcium permanganate, chromium trioxide (chromic acid), copper chlorate, halene (1, 3-dichloro-5, 5-dimethylhydantoin), hydrogen peroxide (greater than 27.5 percent up to 52 percent), lead perchlorate, lithium chlorate, lithium hypochlorite (more than 39 percent available chlorine), lithium perchlorate, magnesium bromate, magnesium chlorate, magnesium perchlorate, mercurous chlorate, nitric acid (more than 40 percent not less than 86 percent), perchloric acid solutions (more than 50 percent but less than 60 percent), potassium perchlorate, potassium permanganate, potassium peroxide, potassium superoxide, silver peroxide, sodium chlorite (40 percent or less by weight), sodium perchlorate, sodium perchlorate monohydrate, sodium permanganate, sodium peroxide, strontium chlorate, strontium perchlorate, thallium chlorate, trichloro-s-triazinetrione (trichloroisocyanuric acid), urea hydrogen peroxide, zinc bromate, zinc chlorate and zinc permanganate.
(Permit = 10 gal liquid or 100 lbs solid; Report = 55 gal liquid or 500 lbs solid)

CLASS 1: An oxidizing material whose primary hazard is that it may increase the burning rate of combustible material with which it comes in contact. Examples: all inorganic nitrates (unless otherwise classified), all inorganic nitrites (unless otherwise classified), ammonium persulfate, barium peroxide, hydrogen peroxide solutions (greater than 8 percent up to 27.5 percent), lead dioxide, lithium hypochlorite (39 percent or less available chlorine), lithium peroxide, magnesium peroxide, manganese dioxide, nitric acid (40 percent concentration or less), perchloric acid solutions (less than 50 percent by weight), potassium dichromate, potassium percarbonate, potassium persulfate, sodium carbonate peroxide, sodium dichloro-s-triazinetrione dihydrate, sodium dichromate, sodium perborate (anhydrous), sodium perborate monohydrate, sodium perborate tetrahydrate, sodium percarbonate, sodium persulfate, strontium peroxide and zinc peroxide.
(Permit = 55 gal liquid or 500 lbs solid; Report = 55 gal liquid or 500 lbs solid)

***Note**: Examples are based on NFPA Standard No. 43-A.*

6. Organic Peroxides

Organic peroxide is a flammable compound which contains the double oxygen or peroxy (-0-0-) group and is subject to explosive decomposition. Organic peroxides may be liquids, pastes, or solids (usually finely divided powders).

The following gives a more detailed classification of organic peroxides.

Classifications of organic peroxides according to hazard:

UNCLASSIFIED: An "unclassified" peroxide is capable of detonation. This peroxide presents an extremely high explosion hazard through rapid explosive decomposition and is regulated, in accordance with Article 77, as Class A explosives.
(Permit = Any Amount; Report = Any Amount)

CLASS I: A Class I peroxide is capable of deflagration, but not detonation. This peroxide presents a high explosion hazard through rapid decomposition. Examples: acetyl cyclohexane sulfonyl 60-65% concentration by weight, fulfonyl peroxide, benzoyl peroxide over 98% concentration, t-butyl hydroperoxide 90%, t-butyl peroxyacetate 75%, t-butyl peroxyisopropylcarbonate 92%, diisopropyl peroxydicarbonate 100%, di-n-propyl peroxydicarbonate 98%,di-n-propyl peroxydi-carbonate 85%.
(Permit = Any Amount; Report = Any Amount)

CLASS II: A Class II peroxide burns very rapidly and presents a severe reactivity hazard. Examples: acetyl peroxide, 25%, t-butyl hydroperoxide 70%, t-butyl peroxybenzoate 98%, t-butyl peroxy-2-ethyl - hex-anoate 97%, t-butyl peroxyisobutyrate 75% t-butyl peroxyisopropyl-carbonate 75%, t-butyl peroxy-pivalate 75%, dybenz-oyl peroxydicarbonate 85%, di-sec-butyl peroxydicar- bonate 98%, di-sec-butyl peroxydicarbonate 75%, 1,1-di-(t-butylperoxy)-3,5,5-trimethyecyclohex- ane 95%, di-(2-ethythexyl) peroxydicarbonate 97%, 2,5-dimethyl-2-5 di (benzoylperoxy) hexane 92%, peroxyacetic acid 43%.
(Permit = Any Amount; Report = Any Amount)

CLASS III: A Class III peroxide burns rapidly and presents a moderate reactivity hazard. Examples: acetyl cyclohexane sulfonyl peroxide 29%, benzoyl peroxide 78%, benzoyl peroxide paste 55%, benzoyl peroxide paste 50%, cumene hydroperoxide 86%, di-(4-butycyclohexyl) peroxydicarbonate 98%, t-butyl peroxy-2-ethytehexanoate 97%, t-butyl peroxyneodecanoate 75%, methyl ethyl ketone peroxide 9% active oxygen diluted in dimethyl phthalate.
(Permit = 10 lbs liquid or solid; Report = 500 lbs liquid or solid)

CLASS IV: A Class IV peroxide burns in the same manner as ordinary combustibles and presents a minimum reactivity hazard. Examples: benzoyl peroxide 70%, benzoyl peroxide paste 50%, benzoyl peroxide slurry 40%, benzoyl peroxide powder 35%, methyl ethyl ketone peroxide 9% active oxygen diluted in water and glycols.
(Permit = 20 lbs liquid or solid; Report = 500 lbs liquid or solid)

CLASS V: A Class V peroxide does not burn or present a decomposition hazard. Examples: benzoyl peroxide 35%, 1,1-di-t-butyl peroxy 3,5,5-trimethycyclohexane 40%, 2,5-di-(t-butyl peroxy) hexane 47%, 2,4-pentanedione peroxide 4% active oxygen.
(Permit = N/A; Report = N/A)

7. Pyrophoric Materials

(Permit = Any Amount; Report = Any Amount)

A pyrophoric materials will spontaneously ignite in air at or below 130^{o}F

(a) **Gases**. Examples: diborane, phosphine, silane**.**

(b) **Liquids**. Examples: diethyl aluminum chloride, diethyl beryllium, diethyl phosphine, diethyl zinc, dimethyl arsine, triethyl aluminum etherate, thriethyl bismuthine, thriethyl boron, trimethyl aluminum, trimethyl gallium.

(c) **Solids**. Examples: cesium, hafnium, lithium, white or yellow phosphorus, plutonium, potassium, rubidium, sodium, thorium.

8. Unstable (Reactive) Materials

This is a material, other than an explosive, which in the pure state or as commercially produced will vigorously polymerize, decompose, condense or become self-reactive and undergo other violent

chemical changes, including explosion, when exposed to heat, friction or shock, or in the absence of an inhibitor or in the presence of contaminants or in contact with noncompatible materials.

CLASS 4: A material which in itself is readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures. This class includes materials which are sensitive to mechanical or localized thermal shock at normal temperatures and pressures. Examples: acetyl peroxide, dibutyl peroxide, dinitrobenzene, ethyl nitrate, peroxyacetic acid, picric acid (dry) trinitrobenzene.
(Permit = Any Amount; Report = Any Amount)

CLASS 3: A material which in itself is capable of detonation or of explosive decomposition or explosive reaction but which requires a strong initiating source or which must be heated under confinement before initiation. This class includes materials which are sensitive to thermal or mechanical shock at elevated temperatures and pressures. Examples: hydrogen peroxide (greater than 52%), hydroxylamine, nitromethane, paranitroaniline, perchloric acid, tetrafluoroethylene monomer.
(Permit = Any Amount; Report = Any Amount)

CLASS 2: A material which in itself is normally unstable and readily undergoes violent chemical change but does not detonate. This class includes materials which can undergo chemical change with rapid release of energy at normal temperatures and pressures and which can undergo violent chemical change at elevated temperatures and pressures. Examples: acrolein, acrylic acid, hydrazine, methacrylic acid, sodium perchlorate, styrene, vinyl acetate.
(Permit = 5 gal liquid or 50 lbs solid; Report = 55 gal liquid or 500 lbs solid)

CLASS 1: A material which in itself is normally stable but which can become unstable at elevated temperatures and pressures. Examples: acetic acid, hydrogen peroxide 35% to 52%, paraldehyde, and tetrahydrofuran.
(Permit = 10 gal liquid or 100 lbs solid; Report = 55 gal liquid or 500 lbs solid)

9. Water-reactive Materials

A materials which, upon exposure to water or moisture, explodes, violently reacts, produces flammable, toxic or other hazardous gases, or evolves enough heat to cause self-ignition or ignition of nearby combustibles.

CLASS 3: A material which reacts explosively with water without requiring heat or confinement. Examples: aluminum alkyls such as triethylaluminum, isobutylaluminum and trimethylaluminum; bromine pentafluoride, bromine trifluoride, chlorodiethylaluminium, diethylzinc.
(Permit = Any Amount; Report = Any Amount)

CLASS 2: A material which may form potentially explosive mixtures with water. Examples: calcium carbide, calcium metal, cyanogen bromide, lithium hydride, methyldichlorosilane, potassium metal, potassium peroxide, sodium metal, sodium peroxide, sulfuric acid, trichlorosilane.
(Permit = 5 gal liquid or 50 lbs solid; Report = 55 gal liquid or 500 lbs solid)

CLASS 1: A material which may react with water with some release of energy but not violently. Examples: acetic anhydride, sodium hydroxide, sulfur monochloride, titanium tetrachloride.
(Permit = 10 gal liquid or 100 lbs solid; Report = 55 gal liquid or 500 lbs solid)

10. Cryogenic Fluids

A material that has a normal boiling point below -150^{o}F (-101.1 ^{o}C)

(a) **Flammable**. Examples: carbon monoxide, deuterium, ethylene, hydrogen, methane.
(Permit = 1 gal; Report = 55 gal)

(b) **Oxidizing**. Examples: fluorine, nitric oxide, oxygen.
(Permit = 10 gal; Report = 55 gal)

(c) **Corrosive**. Examples: fluorine, nitric oxide.
(Permit = 1 gal; Report = 55 gal)

(d) Inert (chemically unreactive). Examples: argon, helium, krypton, neon, nitrogen, xenon.
(Permit = 60 gal; Report = 55 gal)

(e) Highly toxic. Examples: fluorine, nitric oxide.
(Permit = Any Amount; Report = Any Amount)

Note: *All of the cryogenics listed will exist as compressed gases when they are stored at ambient temperatures.*

B. Health Hazards

1. Highly Toxic and Toxic Materials

(a) Highly toxic materials. A highly toxic material produces a lethal dose or lethal concentration which falls within any of the following categories:

1. A chemical that has a median lethal dose (LD_{50}) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

2. A chemical that has a median lethal dose (LD_{50}) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours, or less if death occurs within 24 hours, with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

3. A chemical that has a median lethal concentration (LC_{50}) in air of 200 parts per million or less by volume of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhalation for one hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

Mixtures of these materials with ordinary materials such as water might not warrant classification as highly toxic. While this system is basically simple in application, any hazard evaluation, which is required for the precise categorization of this type of material, shall be performed by experienced, technically competent persons.
(Permit = Any Amount; Report = Any Amount)

Gases - arsine, chlorine trifluoride, cyanogen, diborane, fluorine, germane, hydrogen cyanide, nitric oxide, nitrogen dioxide, ozone, phosphine, hydrogen selenide, stibene.

Liquids - acrolein, acrylic acid, 2-chloroethanol (ethylene chlorohydrin), hydrazine, hydrocyanic acid, 2-methylaziridine (propylenimine), 2-methyllactonitrile (acetone cyanohydrin), methyl ester isocyanic acid (methyl isocyanate), nicotine, tetranitromethane, tetraethylstannane (tetraethyltin).

Solids - (acetato) phenylmercury (phenyl mercuric acetate), 4-aminopyridine, arsenic pentoxide, arsenic trioxide, calcium cyanide, 2-choloracetophenone, aflatoxin B, decaborane (14), mercury (II) bromide (mercuric bromide), mercury (II) chloride (corrosive mercury chloride), pentachlorophenol, methyl parathion, phosphorus (white), sodium azide.

(b) Toxic materials. A toxic material produces a lethal dose or a lethal concentration which falls within any of the following categories:

1. A chemical or substance that has a median lethal dose (LD_{50}) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

2. A chemical or substance that has a median lethal dose (LD_{50}) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours, or less if death occurs within 24 hours, with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

3. A chemical or substance that has a median lethal concentration (LC_{50}) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more

than 2 milligrams per liter but not more than 20 milligrams per liter of mist, fume or dust, when administered by continuous inhalation for one hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

Gases - boron trichloride, boron trifluoride, chlorine, hydrogen fluoride, hydrogen sulfide, phosgene, silicon tetrafluoride.
(Permit = Any Amount; Report = Any Amount)

Liquids - acrylonitrile, allyl alcohol, alpha-chlorotoluene, aniline, 1-chloro-2, 3-epoxypropane, chloroformic acid (allyl ester), 3-chloropropene (allyl chloride), o-cresol, crotonaldehyde, dibromomethane, diisopropylamine, diethyl ester sulfuric acid, dimethyl ester sulfuric acid, 2-furaldehyde (furfural), furfuryl alcohol, phosphorus chloride, phosphoryl chloride (phosphorus oxychloride), thionyl chloride.
(Permit = 10 gal; Report = 55 gal)

Solids - acrylamide, barium chloride, barium (II) nitrate, benzidine, p-benzoquinone, beryllium chloride, cadmium chloride, cadmium oxide, chloroacetic acid, chlorophenylmercury (phenyl mercuric chloride), chromium (VI) oxide (chromic acid, solid), 2,4-dinitrotoluene, hydroquinone, mercury chloride (calomel), mercury (II) sulfate (mercuric sulfate), osmium tetroxide, oxalic acid, phenol, P-phenylenediamine, phenylhydrazine, 4-phenylmorpholine, phosphorus sulfide, potassium fluoride, potassium hydroxide, selenium (IV) disulfide, sodium fluoride.
(Permit = 100 lbs; Report = 500 lbs)

2. Radioactive Materials

A radioactive material spontaneously emits ionizing radiation.
(Permit = Any Amount; Report = Any Amount)

(a) **Common radiation-source materials**. More than 100 radioisotopes are in common usage in various medical and industrial tests and measuring protocols. Most emit beta and gamma radiation. Some emit alpha radiation also while others emit beta or gamma radiation exclusively.

Examples of alpha, beta, gamma emitters: americium-241, bismuth-210, polonium-210, radium-226, uranium-238. These are the heavier isotopes as indicated by high atomic weights.

Examples of beta emitters: calcium-45, carbon-14, hydrogen-3, nickel-63, sulfur-35, tungsten-185, zinc-65.

Examples of gamma emitters: beryllium-7, germanium-71, iron-55, palladium-13, praseodymium-143, promethium-147, tin-113.

(b) **Fissile materials**. Fissile materials may undergo a fission reaction, and are usually found only at reactor sites, or as part of a nuclear weapon. Fissile materials may emit alpha, beta, gamma, and neutron radiation. Examples: plutonium-238, plutonium-239, plutonium-241, uranium-233, uranium-235.

***Note**: Uranium (and certain other radioactive metals) are chemically toxic as well as combustible in solid and finely divided form. When radioactive materials burn, the products of combustion (other than heat) will be radioactive as well.*

3. Corrosives

A corrosive material causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact.
(Permit = 55 gal liquid or 500 lbs solid; Report = 55 gal liquid or 500 lbs solid)

(a) **Acids.** Examples: chromic, formic, hydrochloric (muriatic greater than 15 percent), hydrofluoric, nitric (greater than 6 percent), perchloric, sulfuric (4 percent or more).

(b) Bases (alkalis). Examples: hydroxides - ammonium (greater than 10%), calcium, potassium (greater than 1%), sodium (greater than 1%), and certain carbonates - potassium.

(c) Other corrosives. Examples: gases such as bromine, chlorine, fluorine, iodine, and ammonia.

***Note**: Corrosives which are oxidizers, e.g., nitric acid, chlorine, fluorine; or are compressed gases, e.g., ammonia, chlorine, fluorine; or are water-reactive, e.g., concentrated sulfuric acid, sodium hydroxide, are physical hazards in addition to being health hazards.*

4. Carcinogens, Irritants, Sensitizers and Other Health Hazards

(Refer to published reportable quantities, unless otherwise indicated.)

(a) Carcinogens or suspect carcinogens. Substances which produce or are suspected of producing or inciting cancer. Examples: asbestos, benzene, beryllium, carbon tetrachloride, chloroform, diazomethane, P-dioxane, ethylene dichloride, polychlorinated biphenyls (PCBs), vinyl chloride..
(Permit = 1 gal liquid or 10 lbs solid; Report = 55 gal liquid or 500 lbs solid)

(b) Other health hazards. Substances which cause damage to particular organs or systems.
(Permit = 55 gal liquid or 500 lbs solid; Report = 55 gal liquid or 500 lbs solid)

Hepatotoxin (chemicals which produce liver damage): carbon tetrachloride, nitrosamines.

Nephrotoxins (chemicals which produce kidney damage): halogenated hydrocarbons, uranium.

Neurotoxin (chemicals which produce their primary toxic effects on the nervous system): mercury, carbon disulfide.

Blood or hematopoietic system toxins (chemicals which decrease hemoglobin function, deprive the body tissues of oxygen): carbon monoxide, cyanide.

Pulmonary damage agents (chemicals which irritate or damage the lungs): silica, asbestos.

Reproductive toxins (chemicals which affect the reproductive capabilities, including chromosomal damage [mutations] and effects on fetuses [tersiogenesis]): lead, DBCP.

(c) Irritants. Substances other than corrosive materials which cause a reversible inflammatory effect on living tissue by chemical action at the site of contact: Examples: diphenylaminechloroarsine, xylyl bromide, chloracetophene.
(Permit = 55 gal liquid or 500 lbs solid; Report = 55 gal liquid or 500 lbs solid)

(d) Sensitizers. Substances which cause an allergic reaction in normal tissue after repeated exposure.
(Permit = 55 gal liquid or 500 lbs solid; Report = 55 gal liquid or 500 lbs solid)

5. CalARP-Listed or EHS-Listed Chemicals

This category is not found in the Uniform Fire Code or the California Fire Code. For the purpose of reporting under the HMBP program, chemicals listed under either the CalARP program or the federal EHS List should be noted. Any listed chemical stored in a quantity equal to or greater than its defined threshold planning quantity (TPQ) should be reported, registered (obtain a registration form from the Fire Department) and permitted.

Tables of Regulated Substances
California Accidental Release Prevention (CalARP) Program

Risk Management Plan (RMP)

The federal Accidental Release Prevention Program (40CFR68, 1996) with certain additions specific to the State, has become the California Accidental Release Prevention Program (CalARP). The City of Hayward, as the Certified Unified Program Agency (CUPA) in incorporated Hayward, has given the Fire Department the responsibility for implementing the CalARP within its jurisdiction.

CalARP requires that an owner or operator of a facility located in Hayward and handling a regulated substance in excess of its threshold quantity shall submit information to the Fire Department AND to the Governor's Office of Emergency Services (OES) using the prescribed OES and/or federal (USEPA) forms. The Fire Department will then review the information submitted and determine if the facility is required to submit a Risk Management Plan (RMP).

The following three tables list the substances regulated under the CalARP program with their **chemical names**, Chemical Abstract Service numbers **(CAS No.)**, and their respective threshold quantities **(TQ)** in pounds **(lbs).** Tables 1 and 2, respectively, are those regulated 77 toxic and 63 flammable substances listed under the federal program. Table 3 lists 275 regulated substances under the California Health and Safety Code (Sec. 25531 and following). Note that Table 3 contains 70 of the chemicals listed in Table 1, but with lower TQ's. (The following tables were downloaded from the website of the Office of Emergency Services. For the complete CalARP Regulations, log on to http://www.oes.ca.gov and navigate to "Hazardous Materials" and on to the "CalARP Program.")

EXPLOSIVES that are listed by the Department of Transportation (DOT) as Division 1.1 in 49CFR172.101 are covered and named as a "Class." The threshold quantity for explosives is 5,000 pounds.

Enclosed with this packet, at the very end, is a blank CalARP Program Registration form.

Every owner or operator of a facility handling a regulated substance at an amount equal to or greater than its threshold quantity shall comply with the appropriate requirements of the CalARP program. The following statutes and regulations should be consulted regarding specific CalARP program requirements: Health and Safety Code, Chapter 6.95, Article 8; CFR, Title 40, Part 68 (1996); and CCR, Title 19, Division 2, Chapter 4.5. These regulations are available on the Internet at http//www.oes.ca.gov. Or call the Office of Emergency Services at (916) 464-3230.

Table 1. Federal Regulated Substances List and Threshold Quantities for Accidental Release Prevention

Chemical Name	Also on Table 3[f]	CAS Number	Threshold quantity (lbs)	Basis for listing
Acrolein [2-Propenal]	yes	107-02-8	5,000	b
Acrylonitrile [2-Propenenitrile]	yes	107-13-1	20,000	b
Acrylyl chloride [2-Propenoyl chloride]	yes	814-68-6	5,000	b
Allyl alcohol [2-Propen-l-ol]	yes	107-18-6	15,000	b
Allylamine [2-Propen-l-amine]	yes	107-11-9	10,000	b
Ammonia (anhydrous)	yes	7664-41-7	10,000	a,b
Ammonia (conc 20% or greater)	yes	7664-41-7	20,000	a,b
Arsenous trichloride	yes	7784-34-1	15,000	b
Arsine	yes	7784-42-1	1,000	b
Boron trichloride [Borane, trichloro-]	yes	10294-34-5	5,000	b
Boron trifluoride [Borane, trifluoro-]	yes	7637-07-2	5,000	b
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro [oxybis[metane]]]-, T-4-	yes	353-42-4	15,000	b
Bromine	yes	7726-95-6	10,000	a,b
Carbon disulfide	yes	75-15-0	20,000	b
Chlorine	yes	7782-50-5	2,500	a,b
Chlorine dioxide [Chlorine oxide (ClO2)]	no	10049-04-4	1,000	c
Chloroform [Methane, trichloro-]	yes	67-66-3	20,000	b
Chloromethyl ether [Methane, oxybis[chloro-]]	yes	542-88-1	1,000	b
Chloromethyl methyl ether [Methane, chloromethoxy-]	yes	107-30-2	5,000	b
Crotonaldehyde [2-Butenal]	yes	4170-30-3	20,000	b
Crotonaldehyde, (E)- [2-Butenal, (E)-]	yes	123-73-9	20,000	b
Cyanogen chloride	no	506-77-4	10,000	c
Cyclohexylamine [Cyclohexanamine]	yes	108-91-8	15,000	b
Diborane	yes	19287-45-7	2,500	b
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	yes	75-78-5	5,000	b
1,1-Dimethylhydrazine [Hydrazine,1,1-dimethyl-]	yes	57-14-7	15,000	b
Epichlorohydrin [Oxirane, (chloromethyl)-]	yes	106-89-8	20,000	b
Ethylenediamine [1,2-Ethanediamine]	yes	107-15-3	20,000	b

Table 1. Federal Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 3 [f]	CAS Number	Threshold quantity (lbs)	Basis for listing
Ethyleneimine [Aziridine]	yes	151-56-4	10,000	b
Ethylene oxide [Oxirane]	yes	75-21-8	10,000	a,b
Fluorine	yes	7782-41-4	1,000	b
Formaldehyde (solution)	yes	50-00-0	15,000	b
Furan	yes	110-00-9	5,000	b
Hydrazine	yes	302-01-2	15,000	b
Hydrochloric acid (conc 37% or greater)	no	7647-01-0	15,000	d
Hydrocyanic acid	yes	74-90-8	2,500	a,b
Hydrogen chloride (anhydrous) [Hydrochloric acid]	yes	7647-01-0	5,000	a
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	yes	7664-39-3	1,000	a,b
Hydrogen selenide	yes	7783-07-5	500	b
Hydrogen sulfide	yes	7783-06-4	10,000	a,b
Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	yes	13463-40-6	2,500	b
Isobutyronitrile [Propanenitrile, 2-methyl-]	yes	78-82-0	20,000	b
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	yes	108-23-6	15,000	b
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	yes	126-98-7	10,000	b
Methyl chloroformate [Carbonochloridic acid, methylester]	yes	79-22-1	5,000	b
Methyl hydrazine [Hydrazine, methyl-]	yes	60-34-4	15,000	b
Methyl isocyanate [Methane, isocyanato-]	yes	624-83-9	10,000	a,b
Methyl mercaptan [Methanethiol]	yes	74-93-1	10,000	b
Methyl thiocyanate [Thiocyanic acid, methyl ester]	yes	556-64-9	20,000	b
Methyltrichlorosilane [Silane, trichloromethyl-]	yes	75-79-6	5,000	b
Nickel carbonyl	yes	13463-39-3	1,000	b
Nitric acid (conc 80% or greater)	yes	7697-37-2	15,000	b
Nitric oxide [Nitrogen oxide (NO)]	yes	10102-43-9	10,000	b
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] [1]	no	8014-95-7	10,000	e
Peracetic acid [Ethaneperoxoic acid]	yes	79-21-0	10,000	b
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	yes	594-42-3	10,000	b

Table 1. Federal Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 3 [f]	CAS Number	Threshold quantity (lbs)	Basis for listing
Phosgene [Carbonic dichloride]	yes	75-44-5	500	a,b
Phosphine	yes	7803-51-2	5,000	b
Phosphorus oxychloride [Phosphoryl chloride]	yes	10025-87-3	5,000	b
Phosphorus trichloride [Phosphorous trichloride]	yes	7719-12-2	15,000	b
Piperidine	yes	110-89-4	15,000	b
Propionitrile [Propanenitrile]	yes	107-12-0	10,000	b
Propyl chloroformate [Carbonochloridic acid, propylester]	yes	109-61-5	15,000	b
Propyleneimine [Aziridine, 2-methyl-]	yes	75-55-8	10,000	b
Propylene oxide [Oxirane, methyl-]	yes	75-56-9	10,000	b
Sulfur dioxide (anhydrous)	yes	7446-09-5	5,000	a,b
Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	yes	7783-60-0	2,500	b
Sulfur trioxide	yes	7446-11-9	10,000	a,b
Tetramethyllead [Plumbane, tetramethyl-]	yes	75-74-1	10,000	b
Tetranitromethane [Methane, tetranitro-]	yes	509-14-8	10,000	b
Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	yes	7550-45-0	2,500	b
Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] [1]	yes	584-84-9	10,000	a
Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] [1]	yes	91-08-7	10,000	a
Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] [1]	no	26471-62-5	10,000	a
Trimethylchlorosilane [Silane, chlorotrimethyl-]	yes	75-77-4	10,000	b
Vinyl acetate monomer [Acetic acid ethenyl ester]	yes	108-05-4	15,000	b

1 The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where this regulated substance is handled at partial pressures below 10 mm Hg does not apply to this substance.

Note - Basis for Listing:

a Mandated for listing by Congress.

b On EHS list, vapor pressure 10 mmHg or greater.

c Toxic gas.

d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.

e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

f This column identifies substances which may appear on Table 3. Table 3 may not have concentration limitations.

Table 2. Federal Regulated Flammable Substances List[1] and Threshold Quantities for Accidental Release Prevention

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
Acetaldehyde	75-07-0	10,000	g
Acetylene [Ethyne]	74-86-2	10,000	f
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598-73-2	10,000	f
1,3-Butadiene	106-99-0	10,000	f
Butane	106-97-8	10,000	f
1-Butene	106-98-9	10,000	f
2-Butene	107-01-7	10,000	f
Butene	25167-67-3	10,000	f
2-Butene-cis	590-18-1	10,000	f
2-Butene-trans [2-Butene, (E)]	624-64-6	10,000	f
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000	f
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000	f
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000	g
1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000	g
Cyanogen [Ethanedinitrile]	460-19-5	10,000	f
Cyclopropane	75-19-4	10,000	f
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000	f
Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000	f
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000	f
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000	f
Ethane	74-84-0	10,000	f
Ethyl acetylene [1-Butyne]	107-00-6	10,000	f
Ethylamine [Ethanamine]	75-04-7	10,000	f
Ethyl chloride [Ethane, chloro-]	75-00-3	10,000	f
Ethylene [Ethene]	74-85-1	10,000	f
Ethyl ether [Ethane, 1,1'-oxybis-]	60-29-7	10,000	g
Ethyl mercaptan [Ethanethiol]	75-08-1	10,000	g
Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000	f
Hydrogen	1333-74-0	10,000	f
Isobutane [Propane, 2-methyl]	75-28-5	10,000	f
Isopentane [Butane, 2-methyl-]	78-78-4	10,000	g
Isoprene [1,3-Butadinene, 2-methyl-]	78-79-5	10,000	g
Isopropylamine [2-Propanamine]	75-31-0	10,000	g
Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000	g
Methane	74-82-8	10,000	f
Methylamine [Methanamine]	74-89-5	10,000	f
3-Methyl-1-butene	563-45-1	10,000	f
2-Methyl-1-butene	563-46-2	10,000	g
Methyl ether [Methane, oxybis-]	115-10-6	10,000	f
Methyl formate [Formic acid, methyl ester]	107-31-3	10,000	g
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000	f
1,3-Pentadinene	504-60-9	10,000	f
Pentane	109-66-0	10,000	g
1-Pentene	109-67-1	10,000	g

Table 2. Federal Regulated Flammable Substances List[1] and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
2-Pentene, (E)-	646-04-8	10,000	g
2-Pentene, (Z)-	627-20-3	10,000	g
Propadiene [1,2-Propadiene]	463-49-0	10,000	f
Propane	74-98-6	10,000	f
Propylene [1-Propene]	115-07-1	10,000	f
Propyne [1-Propyne]	74-99-7	10,000	f
Silane	7803-62-5	10,000	f
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000	f
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000	g
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000	g
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000	f
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000	f
Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000	f
Vinyl chloride [Ethene, chloro-]	75-01-4	10,000	a,f
Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000	g
Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000	f
Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000	g
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000	f
Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000	f

[1] A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this chapter (see Section 2770.4.1).

Note - Basis for Listing:
a Mandated for listing by Congress.
f Flammable gas.
g Volatile flammable liquid.

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Acetone Cyanohydrin[2]	no	75-86-5	1,000
Acetone Thiosemicarbazide	no	1752-30-3	1,000/10,000[3]
Acrolein	yes	107-02-8	500
Acrylamide	no	79-06-1	1,000/10,000[3]
Acrylonitrile	yes	107-13-1	10,000
Acrylyl Chloride	yes	814-68-6	100
Aldicarb	no	116-06-3	100/10,000[3]
Aldrin	no	309-00-2	500/10,000[3]
Allyl Alcohol	yes	107-18-6	1,000
Allylamine	yes	107-11-9	500
Aluminum Phosphide[4]	no	20859-73-8	500
Aminopterin	no	54-62-6	500/10,000[3]
Amiton Oxalate	no	3734-97-2	100/10,000[3]
Ammonia[5]	yes	7664-41-7	500
Aniline[2]	no	62-53-3	1,000
Antimycin A	no	1397-94-0	1,000/10,000[3]
ANTU	no	86-88-4	500/10,000[3]
Arsenic Pentoxide	no	1303-28-2	100/10,000[3]
Arsenous Oxide	no	1327-53-3	100/10,000[3]
Arsenous Trichloride	yes	7784-34-1	500
Arsine	yes	7784-42-1	100
Azinphos-Ethyl	no	2642-71-9	100/10,000[3]
Azinphos-Methyl	no	86-50-0	10/10,000[3]
Benzene, 1-(Chloromethyl)-4-Nitro-	no	100-14-1	500/10,000[3]
Benzenearsonic Acid	no	98-05-5	10/10,000[3]
Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	no	3615-21-2	500/10,000[3]
Benzotrichloride[2]	no	98-07-7	100
Bicyclo[2.2.1] Heptane-2-Carbonitrile, 5-Chloro- 6-((((Methylamino) Carbonyl)Oxy)Imino)-, (1s-(1-alpha, 2-beta, 4-alpha, 5-alpha, 6E))-.	no	15271-41-7	500/10,000[3]
Bis(Chloromethyl) Ketone	no	534-07-6	10/10,000[3]
Bitoscanate	no	4044-65-9	500/10,000[3]
Boron Trichloride	yes	10294-34-5	500
Boron Trifluoride	yes	7637-07-2	500

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Boron Trifluoride Compound w/ Methyl Ether (1:1)	yes	353-42-4	1,000
Bromadiolone	no	28772-56-7	100/10,000[3]
Bromine	yes	7726-95-6	500
Cadmium Oxide	no	1306-19-0	100/10,000[3]
Cadmium Stearate	no	2223-93-0	1,000/10,000[3]
Calcium Arsenate	no	7778-44-1	500/10,000[3]
Camphechlor	no	8001-35-2	500/10,000[3]
Cantharidin	no	56-25-7	100/10,000[3]
Bromadiolone	no	28772-56-7	100/10,000[3]
Bromine	yes	7726-95-6	500
Cadmium Oxide	no	1306-19-0	100/10,000[3]
Cadmium Stearate	no	2223-93-0	1,000/10,000[3]
Calcium Arsenate	no	7778-44-1	500/10,000[3]
Camphechlor	no	8001-35-2	500/10,000[3]
Cantharidin	no	56-25-7	100/10,000[3]
Carbachol Chloride	no	51-83-2	500/10,000[3]
Carbamic Acid, Methyl-,o-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene) Amino)-.	no	26419-73-8	100/10,000[3]
Carbofuran	no	1563-66-2	10/10,000[3]
Carbon Disulfide	yes	75-15-0	10,000
Chlorine	yes	7782-50-5	100
Chlormequat Chloride	no	999-81-5	100/10,000[3]
Chloroacetic Acid	no	79-11-8	100/10,000[3]
Chloroform	yes	67-66-3	10,000
Chloromethyl Ether	yes	542-88-1	100
Chloromethyl Methyl Ether	yes	107-30-2	100
Chlorophacinone	no	3691-35-8	100/10,000[3]
Chloroxuron	no	1982-47-4	500/10,000[3]
Chromic Chloride	no	10025-73-7	1/10,000[3]
Cobalt Carbonyl	no	10210-68-1	10/10,000[3]
Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-.	no	62207-76-5	100/10,000[3]
Colchicine	no	64-86-8	10/10,000[3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Coumaphos	no	56-72-4	100/10,000[3]
Coumatetralyl	no	5836-29-3	500/10,000[3]
Cresol, o-	no	95-48-7	1,000/10,000[3]
Crimidine	no	535-89-7	100/10,000[3]
Crotonaldehyde	yes	4170-30-3	1,000
Crotonaldehyde, (E)-	yes	123-73-9	1,000
Cyanogen Bromide	no	506-68-3	500/10,000[3]
Cyanogen Iodide	no	506-78-5	1,000/10,000[3]
Cyanuric Fluoride	no	675-14-9	100
Cycloheximide	no	66-81-9	100/10,000[3]
Cyclohexylamine	yes	108-91-8	10,000
Decaborane(14)	no	17702-41-9	500/10,000[3]
Dialifor	no	10311-84-9	100/10,000[3]
Diborane	yes	19287-45-7	100
Diepoxybutane[2]	no	1464-53-5	500
Digitoxin	no	71-63-6	100/10,000[3]
Digoxin	no	20830-75-5	10/10,000[3]
Dimethoate	no	60-51-5	500/10,000[3]
Dimethyldichlorosilane	yes	75-78-5	500
Dimethylhydrazine	yes	57-14-7	1,000
Dimethyl-p-Phenylenediamine	no	99-98-9	10/10,000[3]
Dimethyl Sulfate[2]	no	77-78-1	500
Dimetilan	no	644-64-4	500/10,000[3]
Dinitrocresol	no	534-52-1	10/10,000[3]
Dinoseb	no	88-85-7	100/10,000[3]
Dinoterb	no	1420-07-1	500/10,000[3]
Diphacinone	no	82-66-6	10/10,000[3]
Disulfoton[2]	no	298-04-4	500
Dithiazanine Iodide	no	514-73-8	500/10,000[3]
Dithiobiuret	no	541-53-7	100/10,000[3]
Emetine, Dihydrochloride	no	316-42-7	1/10,000[3]
Endosulfan	no	115-29-7	10/10,000[3]
Endothion	no	2778-04-3	500/10,000[3]
Endrin	no	72-20-8	500/10,000[3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Epichlorohydrin	yes	106-89-8	1,000
EPN	no	2104-64-5	100/10,000[3]
Ergocalciferol	no	50-14-6	1,000/10,000[3]
Ergotamine Tartrate	no	379-79-3	500/10,000[3]
Ethylenediamine	yes	107-15-3	10,000
Ethylene Fluorohydrin	no	371-62-0	10
Ethyleneimine	yes	151-56-4	500
Ethylene Oxide	yes	75-21-8	1,000
Fenamiphos	no	22224-92-6	10/10,000[3]
Fluenetil	no	4301-50-2	100/10,000[3]
Fluorine	yes	7782-41-4	500
Fluoroacetamide	no	640-19-7	100/10,000[3]
Fluoroacetic Acid	no	144-49-0	10/10,000[3]
Fluoroacetyl Chloride	no	359-06-8	10
Fluorouracil	no	51-21-8	500/10,000[3]
Formaldehyde[5]	yes	50-00-0	500
Formetanate Hydrochloride	no	23422-53-9	500/10,000[3]
Formparanate	no	17702-57-7	100/10,000[3]
Fuberidazole	no	3878-19-1	100/10,000[3]
Furan	yes	110-00-9	500
Gallium Trichloride	no	13450-90-3	500/10,000[3]
Hydrazine	yes	302-01-2	1,000
Hydrocyanic Acid	yes	74-90-8	100
Hydrogen Chloride (gas only)	yes	7647-01-0	500
Hydrogen Fluoride	yes	7664-39-3	100
Hydrogen Selenide	yes	7783-07-5	10
Hydrogen Sulfide	yes	7783-06-4	500
Hydroquinone[6]	no	123-31-9	500/10,000[3]
Iron, Pentacarbonyl-	yes	13463-40-6	100
Isobenzan	no	297-78-9	100/10,000[3]
Isobutyronitrile	yes	78-82-0	1,000
Isocyanic Acid, 3,4-Dichlorophenyl Ester	no	102-36-3	500/10,000[3]
Isodrin	no	465-73-6	100/10,000[3]
Isophorone Diisocyanate	no	4098-71-9	100
Isopropyl Chloroformate	yes	108-23-6	1,000

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Isocyanic Acid, 3,4-Dichlorophenyl Ester	no	102-36-3	500/10,000[3]
Isodrin	no	465-73-6	100/10,000[3]
Isophorone Diisocyanate	no	4098-71-9	100
Isopropyl Chloroformate	yes	108-23-6	1,000
Leptophos	no	21609-90-5	500/10,000[3]
Lewisite[2]	no	541-25-3	10
Lindane	no	58-89-9	1,000/10,000[3]
Lithium Hydride[4]	no	7580-67-8	100
Malononitrile	no	109-77-3	500/10,000[3]
Manganese, Tricarbonyl Methylcyclopentadienyl[2]	no	12108-13-3	100
Mechlorethamine[2]	no	51-75-2	10
Mercuric Acetate	no	1600-27-7	500/10,000[3]
Mercuric Chloride	no	7487-94-7	500/10,000[3]
Mercuric Oxide	no	21908-53-2	500/10,000[3]
Methacrylonitrile	yes	126-98-7	500
Methacryloyl Chloride	no	920-46-7	100
Methacryloyloxyethyl Isocyanate	no	30674-80-7	100
Methamidophos	no	10265-92-6	100/10,000[3]
Methanesulfonyl Fluoride	no	558-25-8	1,000
Methidathion	no	950-37-8	500/10,000[3]
Methiocarb	no	2032-65-7	500/10,000[3]
Methomyl	no	16752-77-5	500/10,000[3]
Methoxyethylmercuric Acetate	no	151-38-2	500/10,000[3]
Methyl Bromide	no	74-83-9	1,000
Methyl 2-Chloroacrylate	no	80-63-7	500
Methyl Chloroformate	yes	79-22-1	500
Methyl Hydrazine	yes	60-34-4	500
Methyl Isocyanate	yes	624-83-9	500
Methyl Isothiocyanate[4]	no	556-61-6	500
Methyl Mercaptan	yes	74-93-1	500
Methylmercuric Dicyanamide	no	502-39-6	500/10,000[3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Methyl Phosphonic Dichloride[4]	no	676-97-1	100
Methyl Thiocyanate	yes	556-64-9	10,000
Methyltrichlorosilane	yes	75-79-6	500
Methyl Vinyl Ketone	no	78-94-4	10
Metolcarb	no	1129-41-5	100/10,000[3]
Mexacarbate	no	315-18-4	500/10,000[3]
Mitomycin C	no	50-07-7	500/10,000[3]
Monocrotophos	no	6923-22-4	10/10,000[3]
Muscimol	no	2763-96-4	500/10,000[3]
Mustard Gas[2]	no	505-60-2	500
Nickel Carbonyl	yes	13463-39-3	1
Nicotine Sulfate	no	65-30-5	100/10,000[3]
Nitric Acid	yes	7697-37-2	1,000
Nitric Oxide	yes	10102-43-9	100
Nitrobenzene[2]	no	98-95-3	10,000
Nitrogen Dioxide	no	10102-44-0	100
Norbormide	no	991-42-4	100/10,000[3]
Organorhodium Complex (PMN-82-147)	no	MIXTURE	10/10,000[3]
Ouabain	no	630-60-4	100/10,000[3]
Oxamyl	no	23135-22-0	100/10,000[3]
Ozone	no	10028-15-6	100
Paraquat Dichloride	no	1910-42-5	10/10,000[3]
Paraquat Methosulfate	no	2074-50-2	10/10,000[3]
Parathion-Methyl	no	298-00-0	100/10,000[3]
Paris Green	no	12002-03-8	500/10,000[3]
Pentaborane	no	19624-22-7	500
Pentadecylamine	no	2570-26-5	100/10,000[3]
Peracetic Acid	yes	79-21-0	500
Perchloromethylmercaptan	yes	594-42-3	500
Phenol	no	108-95-2	500/10,000[3]
Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-	no	4418-66-0	100/10,000[3]
Phenol, 3-(1-Methylethyl)-, Methylcarbamate	no	64-00-6	500/10,000[3]
Phenoxarsine, 10,10'-Oxydi-	no	58-36-6	500/10,000[3]
Phenyl Dichloroarsine[2]	no	696-28-6	500

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Phenylhydrazine Hydrochloride	no	59-88-1	1,000/10,000[3]
Phenylmercury Acetate	no	62-38-4	500/10,000[3]
Phenylsilatrane	no	2097-19-0	100/10,000[3]
Phenylthiourea	no	103-85-5	100/10,000[3]
Phorate[2]	no	298-02-2	10
Phosacetim	no	4104-14-7	100/10,000[3]
Phosfolan	no	947-02-4	100/10,000[3]
Phosgene	yes	75-44-5	10
Phosmet	no	732-11-6	10/10,000[3]
Phosphine	yes	7803-51-2	500
Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl) O-Ethyl Ester.[2]	no	50782-69-9	100
Phosphorus[4]	no	7723-14-0	100
Phosphorus Oxychloride	yes	10025-87-3	500
Phosphorus Pentachloride[4]	no	10026-13-8	500
Phosphorus Trichloride	yes	7719-12-2	1,000
Physostigmine	no	57-47-6	100/10,000[3]
Physostigmine, Salicylate (1:1)	no	57-64-7	100/10,000[3]
Picrotoxin	no	124-87-8	500/10,000[3]
Piperidine	yes	110-89-4	1,000
Potassium Arsenite	no	10124-50-2	500/10,000[3]
Potassium Cyanide[4]	no	151-50-8	100
Potassium Silver Cyanide[4]	no	506-61-6	500
Promecarb	no	2631-37-0	500/10,000[3]
Propargyl Bromide	no	106-96-7	10
Propiolactone, Beta-[2]	no	57-57-8	500
Propionitrile	yes	107-12-0	500
Propiophenone, 4-Amino-	no	70-69-9	100/10,000[3]
Propyl Chloroformate	yes	109-61-5	500

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Propylene Oxide	yes	75-56-9	10,000
Propyleneimine	yes	75-55-8	10,000
Picrotoxin	no	124-87-8	500/10,000[3]
Piperidine	yes	110-89-4	1,000
Potassium Arsenite	no	10124-50-2	500/10,000[3]
Potassium Cyanide[4]	no	151-50-8	100
Potassium Silver Cyanide[4]	no	506-61-6	500
Promecarb	no	2631-37-0	500/10,000[3]
Propargyl Bromide	no	106-96-7	10
Propiolactone, Beta-[2]	no	57-57-8	500
Propionitrile	yes	107-12-0	500
Propiophenone, 4-Amino-	no	70-69-9	100/10,000[3]
Propyl Chloroformate	yes	109-61-5	500
Propylene Oxide	yes	75-56-9	10,000
Propyleneimine	yes	75-55-8	10,000
Prothoate	no	2275-18-5	100/10,000[3]
Pyrene	no	129-00-0	1,000/10,000[3]
Pyridine, 4-Amino-	no	504-24-5	500/10,000[3]
Pyridine, 4-Nitro-, 1-Oxide	no	1124-33-0	500/10,000[3]
Pyriminil	no	53558-25-1	100/10,000[3]
Salcomine	no	14167-18-1	500/10,000[3]
Sarin[2]	no	107-44-8	10
Selenious Acid	no	7783-00-8	1,000/10,000[3]
Semicarbazide Hydrochloride	no	563-41-7	1,000/10,000[3]
Sodium Arsenate	no	7631-89-2	1,000/10,000[3]
Sodium Arsenite	no	7784-46-5	500/10,000[3]
Sodium Azide (Na (N3))[4]	no	26628-22-8	500
Sodium Cacodylate	no	124-65-2	100/10,000[3]
Sodium Cyanide (Na (CN))[4]	no	143-33-9	100
Sodium Fluoroacetate	no	62-74-8	10/10,000[3]
Sodium Selenate	no	13410-01-0	100/10,000[3]
Sodium Selenite	no	10102-18-8	100/10,000[3]
Sodium Tellurite	no	10102-20-2	500/10,000[3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Stannane, Acetoxytriphenyl-	no	900-95-8	500/10,000[3]
Strychnine	no	57-24-9	100/10,000[3]
Strychnine Sulfate	no	60-41-3	100/10,000[3]
Sulfur Dioxide	yes	7446-09-5	500
Sulfuric Acid[7]	no	7664-93-9	1,000
Sulfur Tetrafluoride	yes	7783-60-0	100
Sulfur Trioxide[4]	yes	7446-11-9	100
Tabun[2]	no	77-81-6	10
Tellurium Hexafluoride	no	7783-80-4	100
Stannane, Acetoxytriphenyl-	no	900-95-8	500/10,000[3]
Tetramethyllead	yes	75-74-1	100
Tetranitromethane	yes	509-14-8	500
Thallium Sulfate	no	10031-59-1	100/10,000[3]
Thallous Carbonate	no	6533-73-9	100/10,000[3]
Thallous Chloride	no	7791-12-0	100/10,000[3]
Thallous Malonate	no	2757-18-8	100/10,000[3]
Thallous Sulfate	no	7446-18-6	100/10,000[3]
Thiocarbazide	no	2231-57-4	1,000/10,000[3]
Thiofanox	no	39196-18-4	100/10,000[3]
Thiosemicarbazide	no	79-19-6	100/10,000[3]
Thiourea, (2-Chlorophenyl)-	no	5344-82-1	100/10,000[3]
Thiourea, (2-Methylphenyl)-	no	614-78-8	500/10,000[3]
Titanium Tetrachloride	yes	7550-45-0	100
Toluene-2,4-Diisocyanate[8]	yes	584-84-9	500
Toluene-2,6-Diisocyanate[8]	yes	91-08-7	100
Triamiphos	no	1031-47-6	500/10,000[3]
Trichloro(Chloromethyl)Silane	no	1558-25-4	100
Trichloro(Dichlorophenyl)Silane	no	27137-85-5	500
Triethoxysilane	no	998-30-1	500
Trimethylchlorosilane	yes	75-77-4	1,000
Trimethylolpropane Phosphite	no	824-11-3	100/10,000[3]
Trimethyltin Chloride	no	1066-45-1	500/10,000[3]
Triphenyltin Chloride	no	639-58-7	500/10,000[3]
Tris(2-Chloroethyl)Amine[2]	no	555-77-1	100

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention (Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Valinomycin	no	2001-95-8	1,000/10,000[3]
Vanadium Pentoxide	no	1314-62-1	100/10,000[3]
Vinyl Acetate Monomer	yes	108-05-4	1,000
Warfarin	no	81-81-2	500/10,000[3]
Warfarin Sodium	no	129-06-6	100/10,000[3]
Xylylene Dichloride	no	28347-13-9	100/10,000[3]
Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imino) Pentanenitrile)-, (T-4)-.	no	58270-08-9	100/10,000[3]
Zinc Phosphide[4]	no	1314-84-7	500

1 This column identifies substances which may appear on Table 1. Table 1 may have concentration limitations.

2 Substances that failed the evaluation pursuant to Section 25532(g)(2) of the HSC but remain listed pursuant to potential health impacts. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

3 These extremely hazardous substances are solids. The lesser quantity listed applies only if in powdered form and with a particle size of less than 100 microns; or if handled in solution or in molten form; or the substance has an NFPA rating for reactivity of 2, 3, or 4. Otherwise, a 10,000 pound threshold applies. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

4 These extremely hazardous substances are reactive solids. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

5 Appropriate synonyms or mixtures of extremely hazardous substances with the same CAS number are also regulated, e.g., formalin. The listing of ammonia includes anhydrous and aqueous forms of ammonia pursuant to Section 25532(g)(2).

6 Hydroquinone is exempt in crystalline form.

7 Sulfuric acid fails the evaluation pursuant to Section 25532(g)(2) of the HSC but remains listed as a Regulated Substance only under the following conditions:

a. If concentrated with greater than 100 pounds of sulfur trioxide or the acid meets the definition of oleum. (The Table 3 threshold for sulfur trioxide is 100 pounds.) (The Table 1 threshold for oleum is 10,000 pounds.)

b. If in a container with flammable hydrocarbons (flash point < 73^0 F).

8 The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

HMBP Attachment 3:
Federal List of Extremely Hazardous Substances (EHS) and their Threshold Planning Quantities (TPQ)

Appendix A to 40 CFR Part 355

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
75-86-5	Acetone Cyanohydrin		10	1,000
1752-30-3	Acetone Thiosemicarbazide		1,000	1,000/10,000
107-02-8	Acrolein		1	500
79-06-1	Acrylamide	l	5,000	1,000/10,000
107-13-1	Acrylonitrile	l	100	10,000
814-68-6	Acrylyl Chloride	h	100	100
111-69-3	Adiponitrile	l	1,000	1,000
116-06-3	Aldicarb	c	1	100/10,000
309-00-2	Aldrin		1	500/10,000
107-18-6	Allyl Alcohol		100	1,000
107-11-9	Allylamine		500	500
20859-73-8	Aluminum Phosphide	b	100	500
54-62-6	Aminopterin		500	500/10,000
78-53-5	Amiton		500	500
3734-97-2	Amiton Oxalate		100	100/10,000
7664-41-7	Ammonia	l	100	500
300-62-9	Amphetamine		1,000	1,000
62-53-3	Aniline	l	5,000	1,000
88-05-1	Aniline, 2,4,6-Trimethyl-		500	500
7783-70-2	Antimony Pentafluoride		500	500
1397-94-0	Antimycin A	c	1,000	1,000/10,000
86-88-4	ANTU		100	500/10,000
1303-28-2	Arsenic Pentoxide		1	100/10,000
1327-53-3	Arsenous Oxide	h	1	100/10,000
7784-34-1	Arsenous Trichloride		1	500
7784-42-1	Arsine		100	100
2642-71-9	Azinphos-Ethyl		100	100/10,000
86-50-0	Azinphos-Methyl		1	10/10,000
98-87-3	Benzal Chloride		5,000	500
98-16-8	Benzenamine, 3- (Trifluoromethyl)-		500	500
100-14-1	Benzene, 1-(Chloromethyl)-4- Nitro-.		500	500/10,000
98-05-5	Benzenearsonic Acid		10	10-10,000
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)	g	500	500/10,000
98-07-7	Benzotrichloride		10	100
100-44-7	Benzyl Chloride		100	500
140-29-4	Benzyl Cyanide	h	500	500
15271-41-7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl)Oxy)Imino)-,(1s-(1-alpha, 2-beta, 4-alpha,5-alpha,6E))-		500	500/10,000
534-07-6	Bis(Chloromethyl) Ketone		10	10/10,000
4044-65-9	Bitoscanate		500	500/10,000
10294-34-5	Boron Trichloride		500	500
7637-07-2	Boron Trifluoride		500	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1)		1,000	1,000
28772-56-7	Bromadiolone		100	100/10,000
7726-95-6	Bromine	l	500	500

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
1306-19-0	Cadmium Oxide		100	100/10,000
2223-93-0	Cadmium Stearate	c	1,000	1,000/10,000
7778-44-1	Calcium Arsenate		1	500/10,000
8001-35-2	Campheclor		1	500/10,000
56-25-7	Cantharidin		100	100/10,000
51-83-2	Carbachol Chloride		500	500/10,000
26419-73-8	Carbamic Acid, Methyl-,O-(((2,4-Dimethyl-1,3-Dithiolan-2-yl)Methylene)Amino)-	d	1	100/10,000
1563-66-2	Carbofuran		10	10/10,000
75-15-0	Carbon Disulfide	l	100	10,000
786-19-6	Carbophenothion		500	500
57-74-9	Chlordane		1	1,000
470-90-6	Chlorfenvinfos		500	500
7782-50-5	Chlorine		10	100
24934-91-6	Chlormephos		500	500
999-81-5	Chlormequat Chloride	h	100	100/10,000
79-11-8	Chloroacetic Acid		100	100/10,000
107-07-3	Chloroethanol		500	500
627-11-2	Chloroethyl		1,000	1,000
67-66-3	Chloroform	l	10	10,000
542-88-1	Chloromethyl Ether	h	10	100
107-30-2	Chloromehtyl Methyl Ether	c	10	100
3691-35-8	Chlorophacinone		100	100/10,000
1982-47-4	Chloroxuron		500	500/10,000
21923-23-9	Chlorthiophos	h	500	500
10025-73-7	Chromic Chloride		1	1/10,000
62207-76-5	Cobalt ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',0,0')-		100	100/10,000
10210-68-1	Cobalt Carbonyl	h	10	10/10,000
64-86-8	Colchicine	h	10	10/10,000
56-72-4	Coumaphos		10	100/10,000
5836-29-3	Coumatetralyl		500	500/10,000
95-48-7	Cresol, o-		100	1,000/10,000
535-89-7	Crimidine		100	100/10,000
4170-30-3	Crotonaldehyde		100	1,000
123-73-9	Crotonaldehyde,(E)-		100	1,000
506-68-3	Cyanogen Bromide		1,000	500/10,000
506-78-5	Cyanogen Iodide		1,000	1,000/10,000
2636-26-2	Cyanophos		1,000	1,000
675-14-9	Cyanuric Fluoride		100	100
66-81-9	Cyclohexylamine	l	10,000	10,000
108-91-8	Cyclohexylamine	l	10,000	10,000
17702-41-9	Decaborane(14)		500	500/10,000
8065-48-3	Demeton		500	500
919-86-8	Demeton-S-Methyl		500	500
10311-84-9	Dialifor		100	100/10,000
19287-45-7	Diborane		100	100
111-44-4	Dichloroethyl ether		10	10,000
149-74-6	Dichloromethylphenylsilane		1,000	1,000
62-73-7	Dichlorvos		10	1,000
141-66-2	Dicrotophos		100	100

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
1464-53-5	Diepoxybutane		10	500
814-49-3	Diethyl Chlorophosphate	h	500	500
71-63-6	Digitoxin	c	100	100/10,000
2238-07-5	Diglycidyl Ether		1,000	1,000
20830-75-5	Digoxin	h	10	10/10,000
115-26-4	Dimefox		500	500
60-51-5	Dimethoate		10	500/10,000
2524-03-0	Dimethyl Phosphorochloridothioate		500	500
77-78-1	Dimethyl sulfate		100	500
75-78-5	Dimethyldichlorosilane	h	500	500
57-14-7	Dimethylhydrazine		10	1,000
99-98-9	Dimethyl-p-Phenylenediamine		10	10/10,000
644-64-4	Dimetilan	d	1	500/10,000
534-52-1	Dinitrocresol		10	10/10,000
88-85-7	Dinoseb		1,000	100/10,000
1420-07-1	Dinoterb		500	500/10,000
78-34-2	Dioxathion		500	500
82-66-6	Diphacinone		10	10/10,000
152-16-9	Diphosphoramide, Octamethyl-		100	100
298-04-4	Disulfoton		1	500
514-73-8	Dithiazanine Iodide		500	500/10,000
541-53-7	Dithiobiuret		100	100/10,000
316-42-7	Emetine, Dihydrochloride	h	1	1/10,000
115-29-7	Endosulfan		1	10/10,000
2778-04-3	Endothion		500	500/10,00
72-20-8	Endrin		1	500/10,000
106-89-8	Epichlorohydrin	l	100	100/10,000
2104-64-5	EPN		100	100/1,000
50-14-6	Ergocalciferol	c	1,000	1,000/10,000
379-79-3	Ergotamine Tartrate		500	500/10,000
1622-32-8	Ethanesulfonyl Chloride, 2- Chloro-		500	500
10140-87-1	Ethanol, 1,2- Dichloro-, Acetate		1,000	1,000
563-12-2	Ethion		10	1,000
13194-48-4	Ethoprophos		1,000	1,000
538-07-8	Ethylbis(2- Chloroethyl)Amine	h	500	500
371-62-0	Ethylene Fluorohydrin	c,h	10	10
75-21-8	Ethylene Oxide	l	10	1,000
107-15-3	Ethylenediamine		5,000	10,000
151-56-4	Ethyleneimine		1	500
542-90-5	Ethylthiocyanate		10,000	10,000
22224-92-6	Fenamiphos		10	10/10,000
115-90-2	Fensulfothion	h	500	500
4301-50-2	Fluenetil		100	100/10,000
7782-41-4	Fluorine	k	10	500
640-19-7	Fluoroacetamide	j	100	100/10,000
144-49-0	Fluoroacetic Acid		10	10/10,000
359-06-8	Fluoroacetyl Chloride	c	10	10
51-21-8	Fluorouracil		500	500/10,000
944-22-9	Fonofos		500	500
50-00-0	Formaldehyde	l	100	500
107-16-4	Formaldehyde Cyanohydrin	h	1,000	1,000

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
23422-53-9	Formetanate Hydrochloride	d, h	1	500/10,000
2540-82-1	Formothion		100	100
17702-57-7	Formparanate	d	1	100/10,000
21548-32-3	Fosthietan		500	500
3878-19-1	Fuberidazole		100	100/10,000
110-00-9	Furan		100	500
13450-90-3	Gallium Trichloride		500	500/10,000
77-47-4	Hexachlorocyclopen tadiene	h	10	100
4835-11-4	Hexamethylenediamine, N,N'-Dibutyl-		500	500
302-01-2	Hydrazine		1	1,000
74-90-8	Hydrocyanic Acid		10	100
7647-01-0	Hydrogen Chloride (gas only)		5,000	500
7664-39-3	Hydrogen Fluoride		100	100
7722-84-1	Hydrogen Peroxide (Conc > 52%)	l	1,000	1,000
7783-07-5	Hydrogen Selenide		10	10
7783-06-4	Hydrogen Sulfide	l	100	500
123-31-9	Hydroquinone	l	100	500/10,000
13463-40-6	Iron, Pentacarbonyl-		100	100
297-78-9	Isobenzan		100	100/10,000
78-82-0	Isobutyronitrile	h	1,000	1,000
102-36-3	Isocyanic Acid,3,4- Dichlorophenyl Ester		500	500/10,000
465-73-6	Isodrin		1	100/10,000
55-91-4	Isofluorphate	c	100	100
4098-71-9	Isophorone Diisocyanate		100	100
108-23-6	Isopropyl Chloroformate		1,000	1,000
119-38-0	Isopropylmethylpyrazolyl Dimethylcarbamate	d	1	500
78-97-7	Lactonitrile		1,000	1,000
21609-90-5	Leptophos		500	500/10,000
541-25-3	Lewisite	c, h	10	10
58-89-9	Lindane		1	1,000/10,000
7580-67-8	Lithium Hydride	b	100	100
109-77-3	Malononitrile		1,000	500/10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl	h	100	100
51-75-2	Mechlorethamine	c		C
950-10-7	Mephosfolan		500	500
1600-27-7	Mercuric Acetate		500	500/10,000
7487-94-7	Mercuric Chloride		500	500/10,000
21908-53-2	Mercuric Oxide		500	500/10,000
10476-95-6	Methacrolein Diacetate		1,000	1,000
760-93-0	Methacrylic Anhydride		500	500
126-98-7	Methacrylonitrile. H		1,000	500
920-46-7	Methacryloyl Chloride		100	100
30674-80-7	Methacryloyloxyeth yl Isocyanate	h	100	100
10265-92-6	Methamidophos		100	100/10,000
558-25-8	Methanesulfonyl Fluoride		1,000	1,000
950-37-8	Methidathion		500	500/10,000
2032-65-7	Methiocarb		10	500/10,000
16752-77-5	Methomyl	h	100	500/10,000
151-38-2	Methoxyethylmercuric Acetate		500	500/10,000
80-63-7	Methyl 2- Chloroacrylate		500	500
74-83-9	Methyl Bromide	l	1,000	1,000

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
79-22-1	Methyl Chloroformate	h	1,000	500
60-34-4	Methyl Hydrazine		10	500
624-83-9	Methyl Isocyanate		10	500
556-61-6	Methyl Isothiocyanate	b	500	500
74-93-1	Methyl Mercaptan	l	100	500
3735-23-7	Methyl Phenkapton		500	500
676-97-1	Methyl Phosphonic Dichloride	b	100	100
556-64-9	Methyl Thiocyanate		10,000	10,000
78-94-4	Methyl Vinyl Ketone		10	10
502-39-6	Methylmercuric Dicyanamide		500	500/10,000
75-79-6	Methyltrichlorosilane	h	500	500
1129-41-5	Metolcarb	d	1	100/10,000
7786-34-7	Mevinphos		10	500
315-18-4	Mexacarbate		1,000	500/10,000
50-07-7	Mitomycin C		10	500/10,000
6923-22-4	Monocrotophos		10	10/10,000
2763-96-4	Muscimol		1,000	500/10,000
505-60-2	Mustard Gas	h	500	500
13463-39-3	Nickel Carbonyl		10	1
54-11-5	Nicotine	c	100	100
65-30-5	Nicotine Sulfate		100	100/10,000
7697-37-2	Nitric Acid		1,000	1,000
10102-43-9	Nitric Oxide	c	10	100
98-95-3	Nitrobenzene	l	1,000	10,000
1122-60-7	Nitrocyclohexane		500	500
10102-44-0	Nitrogen Dioxide		10	100
62-75-9	Nitrosodimethylamine	h	10	1,000
991-42-4	Norbormide		100	100/10,000
0	Organorhodium Complex (PMN-82-147)		10	10/10,000
630-60-4	Ouabain	c	100	100/10,000
23135-22-0	Oxamyl	d	1	1
78-71-7	Oxetane, 3,3- Bis(Chloromethyl)-		500	500
2497-07-6	Oxydisulfoton	h	500	500
10028-15-6	Ozone		100	100
1910-42-5	Paraquat Dichloride		10	10/10,000
2074-50-2	Paraquat Methosulfate		10	10/10,000
56-38-2	Parathion	c	10	100
298-00-0....	Parathion-Methyl	c	100	100/10,000
12002-03-8	Paris Green		1	500/10,000
19624-22-7	Pentaborane		500	500
2570-26-5	Pentadecylamine		100	100/10,000
79-21-0	Peracetic Acid		500	500
594-42-3	Perchloromethylmercaptan		100	500
108-95-2	Phenol		1,000	500/10,000
4418-66-0	Phenol, 2,2'- Thiobis(4-Chloro-6-Methyl)-		100	100/10,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate	d	1	500/10,000
58-36-6	Phenoxarsine, 10,10'-Oxydi-		500	500/10,000
696-28-6	Phenyl Dichloroarsine	h	1	500
59-88-1	Phenylhydrazine Hydrochloride		1,000	1,000/10,000
62-38-4	Phenylmercury Acetate		100	500/10,000

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
2097-19-0	Phenylsilatrane	h	100	100/10,000
103-85-5	Phenylthiourea		100	100/10,000
298-02-2	Phorate		10	10
4104-14-7	Phosacetim		100	100/10,000
947-02-4	Phosfolan		100	100/10,000
75-44-5	Phosgene	l	10	10
732-11-6	Phosmet		10	10/10,000
13171-21-6	Phosphamidon		100	100
7803-51-2	Phosphine		100	500
2703-13-1	Phosphonothioic Acid, Methyl-, O- Ethyl O-(4-(Methylthio) Phenyl) Ester		500	500
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1Methylethyl)Amino)Ethyl) O- Ethyl Ester		100	100
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O- Phenyl Ester		500	500
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester		500	500
2587-90-8	Phosphorothioic Acid, O,O- Dimethyl-S-(2- Methylthio) Ethyl Ester	c, g	500	500
7723-14-0	Phosphorus	b, h	1	100
10025-87-3	Phosphorus Oxychloride		1,000	500
10026-13-8	Phosphorus Pentachloride	b	500	500
7719-12-2	Phosphorus Trichloride		1,000	1,000
57-47-6	Physostigmine	d	1	100/10,000
57-64-7	Physostigmine, Salicylate (1:1)	d	1	100/10,000
124-87-8	Picrotoxin		500	500/10,000
110-89-4	Piperidine		1,000	1,000
23505-41-1	Pirimifos-Ethyl		1,000	1,000
10124-50-2	Potassium Arsenite		1	500/10,000
151-50-8	Potassium Cyanide	b	10	10
506-61-6	Potassium Silver Cyanide	b	1	500
2631-37-0	Promecarb	d, h	1	500/10,000
106-96-7	Propargyl Bromide		10	10
57-57-8	Propiolactone, Beta-		10	500
107-12-0	Propionitrile		10	500
542-76-7	Propionitrile, 3- Chloro-		1,000	1,000
70-69-9	Propiophenone, 4- Amino-	g	100	100/10,000
109-61-5	Propyl Chloroformate		500	500
75-56-9	Propylene Oxide	l	100	10,000
75-55-8	Propyleneimine		1	10,000
2275-18-5	Prothoate		100	100/10,000
129-00-0	Pyrene	c	5,000	1,000/10,000
140-76-1	Pyridine, 2-Methyl-5-Vinyl-		500	500
504-24-5	Pyridine, 4-Amino-	h	1,000	500/10,000
1124-33-0	Pyridine, 4-Nitro-,l-Oxide		500	500/10,000
53558-25-1	Pyriminil	h	100	100/10,000
14167-18-1	Salcomine		500	500/10,000
107-44-8	Sarin	h	10	10
7783-00-8	Selenious Acid		10	1,000/10,000
7791-23-3	Selenium Oxychloride		500	500
563-41-7	Semicarbazide Hydrochloride		1,000	1,000/10,000
3037-72-7	Silane, (4- xymethyl-		1,000	1,000

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
7631-89-2	Sodium Arsenate		1	1,000/10,000
7784-46-5	Sodium Arsenite		1	500/10,000
26628-22-8	Sodium Azide(Na(N<INF>3))	b	1,000	500
124-65-2	Sodium Cacodylate		100	100/10,000
143-33-9	Sodium Cyanide(Na(CN))	b	10	100
62-74-8	Sodium Fluoroacetate		10	10/10,000
13410-01-0	Sodium Selenate		100	100/10,000
10102-18-8	Sodium Selenite	h	100	100/10,000
10102-20-2	Sodium Tellurite		500	500/10,000
900-95-8	Stannane, Acetoxytriphenyl-	g	500	500/10,000
57-24-9	Strychnine	c	10	100/10,000
60-41-3	Strychnine Sulfate		10	100/10,000
3689-24-5	Sulfotep		100	500
3569-57-1	Sulfoxide, 3- Chloropropyl Octyl		500	500
7446-09-5	Sulfur Dioxide	1	500	500
7783-60-0	Sulfur Tetrafluoride		100	100
7446-11-9	Sulfur Trioxide	b	100	100
7664-93-9	Sulfuric Acid		1,000	1,000
77-81-6	Tabun	c, h	10	10
7783-80-4	Tellurium Hexafluoride	k	100	100
107-49-3	TEPP		10	100
13071-79-9	Terbufos	h	100	100
78-00-2	Tetraethyllead	c	10	100
597-64-8	Tetraethyltin	c	100	100
75-74-1	Tetramethyllead	c, l	100	100
509-14-8	Tetranitromethane		10	500
10031-59-1	Thallium Sulfate	h	100	100/10,000
6533-73-9	Thallous Carbonate	c, h	100	100/10,000
7791-12-0	Thallous Chloride	c, h	100	100/10,000
2757-18-8	Thallous Malonate	c, h	100	100/10,000
7446-18-6	Thallous Sulfate		100	100/10,000
2231-57-4	Thiocarbazide		1,000	1,000/10,000
39196-18-4	Thiofanox		100	100/10,000
297-97-2	Thionazin		100	500
108-98-5	Thiophenol		100	500
79-19-6	Thiosemicarbazide		100	100/10,000
5344-82-1	Thiourea, (2- Chlorophenyl)-		100	100/10,000
614-78-8	Thiourea, (2- Methylphenyl)-		500	500/10,000
7550-45-0	Titanium Tetrachloride		1,000	100
584-84-9	Toluene 2,4- Diisocyanate		100	500
91-08-7	Toluene 2,6- Diisocyanate		100	100
110-57-6	Trans-1,4- Dichlorobutene		500	500
1031-47-6	Triamiphos		500	500/10,000
24017-47-8	Triazofos		500	500
76-02-8	Trichloroacetyl Chloride		500	500
115-21-9	Trichloroethylsilane	h	500	500
327-98-0	Trichloronate	k	500	500
98-13-5	Trichlorophenylsilane	h	500	500
1558-25-4	Trichloro(Chloromethyl)Silane		100	100
27137-85-5	Trichloro(Dichlorophenyl) Silane		500	500
998-30-1	Triethoxysilane		500	500

CAS No.	Chemical Name	Notes	Reportable Quantity* (pounds)	Threshold Planning Quantity (pounds)
75-77-4	Trimethylchlorosilane		1,000	1,000
824-11-3	Trimethylolpropane Phosphite	h	100	100/10,000
1066-45-1	Trimethyltin Chloride		500	500/10,000
639-58-7	Triphenyltin Chloride		500	500/10,000
555-77-1	Tris(2- Chloroethyl)Amine	h	100	100
2001-95-8	Valinomycin	c	1,000	1,000/10,000
1314-62-1	Vanadium Pentoxide		1,000	100/10,000
108-05-4	Vinyl Acetate Monomer	1	5,000	1,000
81-81-2	Warfarin		100	500/10,000
129-06-6	Warfarin Sodium	h	100	100/10,000
28347-13-9	Xylylene Dichloride		100	100/10,000
58270-08-9	Zinc, Dichloro(4,4- Dimethyl-5((((Methylamino) Carbonyl) Oxy)Imino)Pentane nitrile)-, (T-4)-		100	100/10,000
1314-84-7	Zinc Phosphide	b	100	500

*Only the statutory or final RQ is shown. For more information, see 40 CFR Table 302.4.

Notes:

a This chemical does not meet acute toxicity criteria. Its TPQ is set at 10,000 pounds.

b This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, nonsolution form.

c The calculated TPQ changed after technical review as described in the technical support document.

d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.

e Statutory reportable quantity for purposes of notification under SARA Sec. 304(a)(2).

f [Reserved]

g New chemicals added that were not part of the original list of 402 substances.

h Revised TPQ based on new or re-evaluated toxicity data.

j TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.

k The TPQ was revised after proposal due to calculation error.

l Chemicals on the original list that do not meet toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern (“Other chemicals”).

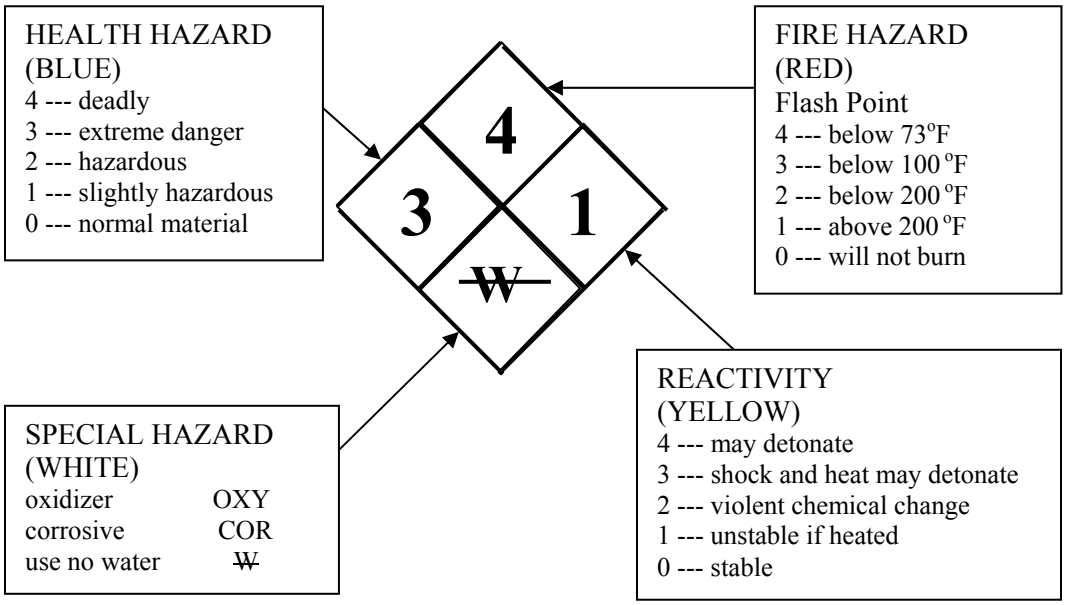
HMBP Attachment 4:
Guidelines for the Placarding of Hazardous Materials Facilities
(Based on NFPA 704 and UFC Standard 79-3 Placarding System)

In order to provide adequate warning to firefighters and other emergency-response personnel when they are approaching a potentially hazardous situation, the Fire Department implements a placarding system. Placards are required to indicate the greatest possible hazards from certain materials stored or used in facilities or building.

In accordance with the Uniform Fire Code, the Hayward Fire Department has adopted the UFC Standard 79-3 Placarding System for facilities and buildings. The system provides basic information to emergency personnel concerned with control and prevention of fires in industrial plants and storage facilities. It has become widely used in the country, principally because it is simple and easy to understand.

The placarding system, often referred to as the NFPA diamond, indicates the hazards of materials in terms of three categories **(health, flammability, and reactivity)** and indicates the degree of severity in each category by five divisions ranging **from "0" (no hazard) to "4" (severe hazard).** The symbols are arranged in three diamonds of different colors that, when complemented by a fourth, comprise a bigger diamond. The colors indicate the hazard categories, and are arranged as follows: the left diamond is blue for health; the top diamond is red for flammability; the right diamond is yellow for reactivity; and the bottom fourth diamond is white, reserved for additional information and special hazard symbols.

A drawing on the following page illustrates the NFPA 704 diamond, defines each hazard category, and summarizes the hazard rating scale. Hazard ratings for different materials may be found in reference books and material safety data sheets (MSDS). One may also assign these ratings based on knowledge of the inherent hazards of the material in question, the processes in which the material is used, and conditions in the plant or facility. Special hazard symbols that may be used on the white diamond include OXY (oxidizer), COR (corrosive), W (water-reactive), and the radioactive wheel for radiation hazard.



WHEN IS A PLACARD REQUIRED?

A placard is required when the total quantity of hazardous materials of the same hazard rating exceeds a set minimum amount.

HOW DO I DETERMINE THE CORRECT RATING FOR EACH CATEGORY OF THE NFPA DIAMOND?

To determine the correct rating for each category on the NFPA diamond, follow these steps:

1. Determine the hazard rating for each category, for each material stored in the building or building subdivision. Refer to labels, MSDS's or other sources of information; and
2. Compare the total (aggregate) amount of material(s) with the same hazard rating in each category with the values in Table I below to determine the rating to be used for the category on the building placard.

TABLE I: MINIMUM QUANTITIES FOR EACH HAZARD RATING

Hazard Category	Category Color	Rating Number	Minimum Aggregate Amount Requiring Placard		
			Pounds	Gallons	Cu. ft. (STP)
HEALTH	BLUE	**4**	100	10	50
		3	100	10	50
		2	500	55	1,000
		1	1,000	110	2,000
FIRE	RED	**4**	500	55	1,000
		3	500	55	1,000
		2	1,000	110	2,000
		1	2,000	220	4,000
REACTIVITY	YELLOW	**4**	100	10	50
		3	100	10	50
		2	500	55	1,000
		1	500	55	1,000

For example, start with all materials that have a HEALTH rating of "4". Does the aggregate amount of these materials equal or exceed 100 lbs solid or 10 gal. Liquid or 50 cu. ft. gas? If it does, then the facility warrants a HEALTH category rating of "4" to be posted on the blue section of the facility NFPA diamond. If the total is less, move on to all materials with a HEALTH category rating of "3". If "3" is not warranted, move on to "2" and so on through "1". If none of the rating requirements for this hazard category is met, the blue section is marked "0".

3. After the Health category rating is determined, use the same process to determine the IRE category rating which will go on the red section of the facility NFPA diamond. After that, determine the REACTIVITY category rating to go on the yellow section. Note that if all three hazard categories are rated "0", no placard is required.
4. Determine any SPECIAL hazards for the fourth (white) section. If none is indicated, leave this section blank.
5. Exclude materials stored in underground tanks when determining quantities for each hazard category rating.

HOW BIG SHOULD THE FACILITY NFPA 704 DIAMOND BE?

Placards and numbers should be of appropriate sizes to be visible and legible from the street, in the direction of approach to the facility.

1. Minimum placard size is 10 inches x 10 inches with 4-inch numbers.
2. In the case of a commercial use located close to the street with a very common hazardous material commonly associated with the business (e.g. nitrous oxide in a dentist's office, waste oil in an auto repair shop, or perchloroethylene in a dry cleaning shop), smaller placards may be used as long as the sign is visible, although not necessarily legible, from the street.

Requests to use smaller placards must be made to the Fire Department. These will be evaluated on a case-by-case basis.

WHERE SHOULD THE NFPA DIAMOND BE PLACED?

Placards must be placed so that they give adequate warning to firefighters when they are approaching a facility.

Placards shall be affixed to buildings at an appropriate height so that at least one is visible from each direction of approach. They should not be covered by parked vehicles, shrubbery, or by closed or open doors.

Recommended placements include: above exterior manway doors on the outside of a building; above or adjacent to roll-up doors or warehouses, placed high enough so that the placard will not be covered by a truck parked while loading or unloading; and at the upper left-hand or upper right-hand corner of a one-story building's outside wall, about 2 feet below the roof line.

If a building cannot easily be seen from the street when approaching the property, a placard must be placed at the property line on a facility gate or post.

Small, detached storage buildings may be placarded at eye level, at the center of the structure's outside wall, visible from the direction of approach.

WHAT OTHER THINGS SHOULD BE CONSIDERED IN PLACARDING A FACILITY?

1. The background color of the building wall should not blend in with the hazard category off the colors of blue, red, or yellow. If it does, a white background should set the entire NFPA diamond building wall.
2. Hazard category colors should be maintained and not allowed to fade.
3. When multiple special hazards exist, they shall be listed on additional white background signs below the NFPA diamond.
4. Placards should be revised if the inventory of materials stored within the facility has substantially changed. Remove placards when chemical hazards no longer exist or when the facility or building is vacated.
5. Placards may be fabricated in-house by the facility or purchased from safety-supply companies. Consult the yellow pages of the telephone directory for suppliers of "safety equipment".
6. Placards for building subdivisions like rooms and storage areas shall not be smaller than 8 in. x 8 in. with numbers of an appropriate size to be easily read.

NFPA DIAMOND RATINGS FOR COMMON HAZARDOUS MATERIALS

Chemical Name	Health (Blue)	Fire (Red)	Reactivity (Yellow)	Special (White)
Acetylene	1	4	2	
Diesel fuel	0	2	0	
Gasoline	1	3	0	
Motor oil (Used/Waste/ Fresh/New)	1	1	0	
Coolant/ Antifreeze	1	1	0	
Muriatic acid / Hydrochloric acid	3	0	0	COR
Nitrous oxide	1	0	0	OXY
Perchloroethylene	2	0	0	
Sodium Hydroxide	3	0	1	COR

MORE NFPA DIAMOND RATINGS FOR HAZARDOUS MATERIALS

Chemical Name	Health (Blue)	Fire (Red)	Reactivity (Yellow)	Special (White)
Acetic acid (glacial)	2	2	1	
Acetone	1	3	0	
Ammonia (anhydrous)	3	1	0	
Calcium Carbide	1	4	2	~~W~~
Calcium hypochlorite	2	0	2	OXY
Carbon tetrachloride	3	0	0	
Chlorine	3	0	0	COR, OXY
Creosote oil	2	2	0	
Denatured alcohol	0	3	0	
Dichlorosilane	3	4	2	
Endrin (dry)	2	0	0	
Ethyl alcohol	0	3	0	
Ethylene glycol	1	1	0	
Ethylene oxide	2	4	3	
Formaldehyde	2	2	0	
Gasoline, 56-100 octane	1	3	0	
Glycerine	1	1	0	
Hydrocyanic acid, 96%	4	4	2	
Hydrogen	0	4	0	
Hydrochloric acid	3	0	0	COR
Hydrofluoric acid	4	0	0	COR
Hydrogen peroxide (35%-52%)	2	0	1	OXY
Jet Fuel (JP-4)	1	3	0	
Jet Fuel (JP-5)	0	2	0	
Isopropyl alcohol	1	3	0	
Methyl alcohol	1	3	0	
Methyl chloride	2	4	0	
Methylene chloride	2	1	0	
Methyl ethyl ketone	1	3	0	
Mineral spirits	0	2	0	
Naphtha	1	3	0	
Nitric acid	3	0	0	COR, OX
Oxygen (liquid)	3	0	0	OX
Phosgene	4	0	0	
Phosphine	3	4	1	
Phosphoric acid	2	0	0	COR
Potassium hydroxide (lye)	3	0	1	
Propylene glycol	0	1	0	
Stoddard solvent	0	2	0	
Sulfuric Acid	3	0	2	COR
1,1,1-Trichloroethane	3	1	1	
Trichloroethylene	2	1	0	
Turpentine	1	3	0	
Vinyl chloride	2	4	1	

ATTACHMENT 5

CLAIM OF EXEMPTION

For Reporting Year _____

HAZARDOUS MATERIALS BUSINESS PLAN / HAZARDOUS MATERIALS INVENTORY

You may be exempted from the filing of a Hazardous Materials Business Plan (HMBP) by completing, signing, and submitting this Claim of Exemption… ***ONLY IF ALL OF THE FOLLOWING APPLY:***

(1) *You have no hazardous materials or you do not generate hazardous waste at this facility; OR not one type of hazardous material or hazardous waste found in your facility exceeds 55 gallons (if liquid), 500 pounds (if solid), or 200 cubic feet at standard temperature and pressure (if gaseous); OR you meet any one of the following exemption conditions:*

A. If you are a physician, dentist, podiatrist, veterinarian and or pharmacist and you store up to 1,000 cu. ft. of **medical gases like oxygen, nitrogen, or nitrous oxide** you are exempt from filing an HMBP. (You may have 1,000 cu. ft. of each and still claim the exemption). IF YOU ARE A NEW BUSINESS, YOU MUST STILL NOTIFY THE HAYWARD FIRE DEPARTMENT AND COMPLETE THE FORMS, ONE TIME ONLY.

B. Up to 275 gallons of **lubricating oils and related materials** (e.g. hydraulic fluids, crankcase oils, grease, or transmission fluid) is EXEMPT, IF you do not have more than 55 gallons of any one type of product. WASTE OIL IS NOT EXEMPT AND MUST BE REPORTED AT OR ABOVE 55 GALLONS, EVEN IF YOU QUALIFY FOR THE LUBRICATING OIL EXEMPTION. Submit an HMBP if you have over 55 gallons of waste oil or over 55 gallons of one type of lubricating oil.

C. Hazardous materials contained solely in a **consumer product** for direct distribution to, and for use by the general public is EXEMPT. WAREHOUSE QUANTITIES ARE NOT EXEMPT.

(2) You, as the business owner or its officially designated representative, can sign and attest to all the statements in this Claim of Exemption; AND

(3) You have not been required expressly by the Hayward Fire Department to submit an HMBP despite the low level of inventory. (In exceptional cases, the Fire Department may require an HMBP from a facility even if its inventory does not meet the thresholds in (1) above, if the materials involved are radioactive or otherwise extremely or acutely hazardous.)

I CERTIFY UNDER PENALTY OF LAW THAT :

I have personally investigated and am familiar with the information referred to in this document as it applies to this facility. Based on my inquiry, I believe that this facility is exempted from the requirement to prepare and submit a Hazardous Materials Business Plan, at this time. Should the inventory change and this facility no longer meets the exemption conditions described above, I will file the required HMBP within 30 days of such change.

Name: _____ Signature: _____

Title: _____ Date Signed: _____

Facility Name: _____

Facility Address: _____

Complete, sign and return to:
HAYWARD FIRE DEPARTMENT
777 B Street, Hayward, CA 94541-5007

ATTACHMENT 6
CERTIFICATION STATEMENT
For Reporting Year _____

HAZARDOUS MATERIALS BUSINESS PLAN / HAZARDOUS MATERIALS INVENTORY

*If no change in your hazardous materials inventory has occurred since you submitted a complete Hazardous Materials Business Plan (HMBP), you may comply with the annual inventory reporting requirements of **State law** by completing, signing, and submitting this Certification Statement… ONLY IF ALL THE FOLLOWING APPLY:*

(1) You have previously filed a complete HMBP within the past three years;

(2) You, as the business owner or its officially designated representative, can sign and attest to all the statements in this Certification Statement; AND

(3) You are not using the certification statement to comply with the annual federal reporting requirements under the Emergency Planning and Community Right-to-know Act (EPCRA).

*Regardless of whether a change has occurred or not, facilities subject to **federal law**, EPCRA, must annually submit the following documents: (a) Business Activities page; (b) Business Owner/Operator Identification page; and (c) Chemical Description page for each reportable federal Extremely Hazardous Substance (EHS). Note that a Chemical Description page for an EHS must contain an original signature.*

I CERTIFY UNDER PENALTY OF LAW THAT :

I have personally examined and am familiar with the information referred to or submitted in this and all attached documents. Based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

I FURTHER CERTIFY THAT:

(1) The information contained in the Hazardous Materials Inventory Statement (HMIS) most recently submitted to the Hayward Fire Department as part of this facility's Hazardous Materials Business Plan (HMBP) is complete, accurate and up-to-date;

(2) There has been no change in the quantity of hazardous materials reported in the HMIS most recently submitted to the Hayward Fire Department; AND

(3) No hazardous materials subject to inventory reporting requirements are being handled that are not listed in the HMIS most recently submitted to the Hayward Fire Department.

Name: _____ Signature: _____

Title: _____ Date Signed: _____

Facility Name: _____

Facility Address: _____

HAYWARD FIRE DEPARTMENT
777 B Street, Hayward, CA 94541-5007

ATTACHMENT 7

PROPERTY OWNER INFORMATION

HAZARDOUS MATERIALS BUSINESS PLAN / HAZARDOUS MATERIALS INVENTORY

The property where the business or facility is located is not owned by the business or by the business owner/operator.

Contact Information for the property owner follows:

Name of Property Owner (If a business, provide Name of Contact)
Mailing Address
Telephone Number
Fax Number, if available

Above Information provided by:

Name: _____ Signature: _____

Title: _____ Date Signed: _____

Facility Name: _____

Facility Address: _____

Complete, sign and return to:

HAYWARD FIRE DEPARTMENT
777 B Street, Hayward, CA 94541-5007

Attachment 8:
Do you have to file a Recyclable Materials Report?

Answer the questions below and follow through the flow to determine whether or not you have to file a RECYCLABLE MATERIALS REPORT.

COMPLETE AND SUBMIT THIS PAGE WITH YOUR HMBP!

(1)	Do you recycle more than 100 kilograms (220 pounds) of material per month?	**YES. Go to (2)**	**NO. Go to (4)**
(2)	Do you recycle your own waste? In other words, do you recycle waste generated from this facility, at this facility?	**YES. Go to (5)**	**NO. Go to (3)**
(3)	Do other facilities send you their waste for recycling? In other words, do you recycle waste generated from other facilities, at this facility?	**YES. Go to (6)**	**NO. Go to (4)**

(4) *You are NOT an onsite or an offsite recycler. You are NOT required to file a "Recyclable Materials Biennial Report."*
Check the appropriate box below and we will note your declaration.

(5) *You are a recycler and a generator.*
You are required to file a State "Recyclable Materials Biennial Report."
Check the appropriate box below and we will send you a blank form.

(6) *You are a recycler but not the generator.*
You are required to file a State "Recyclable Materials Biennial Report" for each generator that sends you its waste.
Check the appropriate box below and we will send you the blank form/s.

Please check appropriate box below:

❒ **(4)** This facility is NOT a recycler.

❒ **(5)** This facility is a recycler and generator.
Send a blank "Recyclable Materials Biennial Report" form.

❒ **(6)** This facility is a recycler of other facility's hazardous waste.
Send _____ (how many?) blank "Recyclable Materials Biennial Report" form/s.

Name of Facility:

COMPLETE AND SUBMIT THIS PAGE WITH YOUR HMBP!

Hayward Fire Department
California Accidental Release Prevention (CalARP) Program

Program Registration
Please read carefully before completing Registration Form.

GENERAL INFORMATION

This registration form is to be completed by an owner or operator of a stationary source that handles one or more regulated substances in a process in excess of the threshold quantity (see definition below). To complete this form, the registrant should refer to the CalARP program regulations. These are codified in the California Code of Regulations (CCR), Title 19, Division 2, Chapter 4.5, Sections 2735.1 through 2785.1. The list of regulated substances and threshold quantities are in section 2770.5. Information on the CalARP program and the regulations are located on the Governor's Office of Emergency Services' (OES) Internet home page at http://www.oes.ca.gov. In Hayward, the completed registration form must be submitted to the Hayward Fire Department, a certified unified program agency (CUPA).

The following definitions of terms should assist the registrant in completing this form:

Process means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purpose of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

Regulated substance means any substance, unless otherwise indicated, listed in CCR Title 19, section 2770.5.

Stationary source means any buildings, structures, equipment, installations, or substance-emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. A stationary source includes transportation containers that are no longer under active shipping papers and transportation containers that are connected to equipment at the stationary source for the purposes of temporary storage, loading, or unloading. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of CCR Title 19, Chapter 4.5. Transportation included, but is not limited to, transportation subject to oversight or regulations under Title 49 of the Code of Federal Regulations, parts 192, 193, or 195. Properties shall not be considered contiguous solely because of a railroad or gas pipeline right-of-way. A stationary source does not include naturally occurring hydrocarbon reservoirs.

Threshold quantity means the quantity specified for a regulated substance pursuant to CCR Title 19, section 2770.5 and determined to be present at a stationary source as specified in Section 2770.2.

INSTRUCTIONS FOR COMPLETING THE CalARP PROGRAM REGISTRATION FORM

Please indicate the number of pages to be submitted in the upper right hand corner of each form completed. Use additional pages if the number of regulated substances handled exceeds the space available on one page. Indicate if this is a "new" registration or a registration "update" by checking the appropriate box. If this form updates a previously submitted registration, indicate the type of update as follows: check "add" if a regulated substance is being added; check "delete" if a regulated substance is being deleted; check "revise" if any other information is being revised.

I. **Business Owner / Operator Information:** Complete business name, address (number and street), city, county, state, and ZIP code; and owner or operator name and telephone number.

II. **Regulated Substance List:** *A. Name of Each Regulated Substance* – provide the chemical name and Chemical Abstracts Service (CAS) number for each regulated substance held above the threshold quantity in a process, and the maximum quantity of each regulated substance in the process (in pounds), to two significant digits (refer to CCR Title 19, Section 2770.2 and 2770.5); *B. Name of each Regulated Substance in a Mixture* – Provide the chemical name and CAS number of each regulated substance in the mixture held above the threshold quantity in a process, the percent weight of the regulated substance in the mixture, and the maximum quantity of each regulated substance in the process (in pounds), to two significant digits (refer to CCR Title 19, Section 2770.2 and 2770.5). *Note: Specifically identify any information on this form which is classified information or trade secret.*

III. **Certification:** Read the certification statement and provide the owner or operator name, signature, and the date when executed.

If you need further assistance in completing this form, contact the Hazardous Materials Office at (510) 583-4910.

Hayward Fire Department
California Accidental Release Prevention (CalARP) Program

PROGRAM REGISTRATION

Page _____ of _____

READ ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

Registration Type	Update Type
☐ NEW ☐ UPDATE	☐ ADD ☐ DELETE ☐ REVISE

I. Business Owner / Operator Information

Business Name

Street Address

City	County	State	ZIP Code

Owner / Operator Name	Phone Number

II. Regulated Substance List

A. Name of Each Regulated Substance	Process Maximum Quantity (lbs)	CAS Number
1.		
2.		
3.		
4.		
5.		
6.		

B. Name of Each Regulated Substance in a Mixture	Percent Weight	Process Maximum Quantity (lbs)	CAS Number
1.			
2.			

III. Certification

I, the owner or operator of the aforementioned business, hereby certify that the registration information provided above is true, accurate, and complete to the best of my knowledge, based upon reasonable inquiry. I am fully aware that this certification, executed on the date indicated below, is made under the penalty of perjury under the laws of the State of California.

Printed name of Owner / Operator

Signature of Owner / Operator	Date Signed